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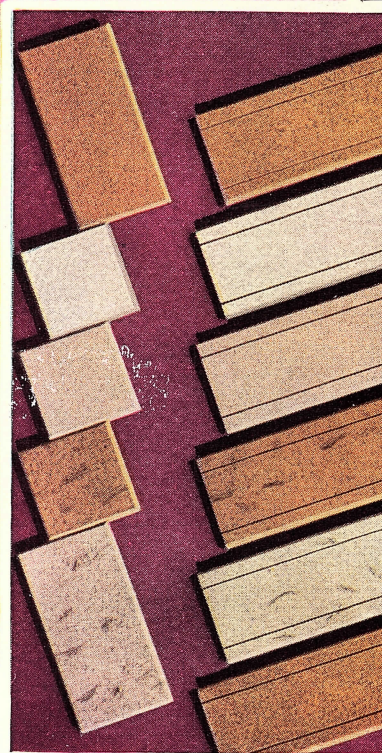
is made of Celotex Studio Board, painted white.

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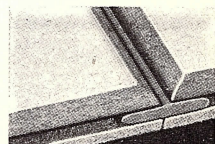
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OCTOBER 1938

★
THE
ARCHITECTURAL FORUM
announces the inclusion of

THE ARCHITECT'S WORLD

as a regular feature
starting with this issue
and the appointment of
Henry H. Saylor,
recently publisher of
The Architect's World
and formerly editor
of Architecture, to
THE FORUM's editorial staff.

★
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M-G-M ART
DEPT.

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THE ARCHITECTURAL FORUM is published by Time Inc., Henry R. Luce, President; Ralph McA. Ingersoll, Roy E. Larsen, Vice Presidents; Charles L. Stillman, Treasurer; W. W. Commons, Secretary. Publication Office, Erie Ave., P & G Streets, Philadelphia, Pa. Executive, Editorial and Advertising Offices, Time & Life Building, Rockefeller Center, New York. Business Manager, H. A. Richter, Advertising Manager, George P. Shutt. Subscription Office, 330 East 22nd Street, Chicago, Illinois. Address all editorial correspondence to Time & Life Building, Rockefeller Center, New York. Yearly subscription, Payable in advance, U. S. and Possessions, Canada, Cuba, Mexico, South America, \$4.00. Elsewhere \$6.00. Single issues, including Reference Numbers, \$1.00. All copies Mailed Flat. Copyright under International Copyright Convention. All rights reserved under Pan American Copyright Convention. Copyright, 1938, by Time Inc.

VOLUME 69—NUMBER FOUR

THE MONTH IN BUILDING

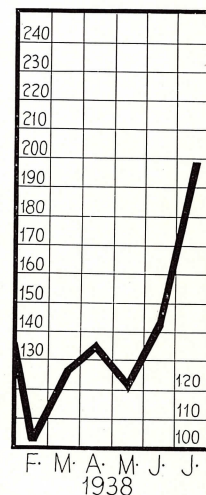
VOLUME

PERMITS (July)	\$198,198,188	CONTRACTS (August)	\$313,141,000
Residential	125,656,532	Residential	99,732,000
Non-residential	46,010,069	Non-residential	87,316,000
Additions, repairs	26,531,587	Heavy engineering	126,093,000
June, 1938	140,481,118	July, 1938	239,799,000
July, 1937	132,303,321	August, 1937	285,104,000
Source: U. S. Dept. of Labor		Source: F. W. Dodge Corp.	

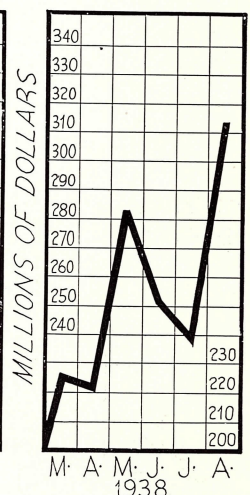
Under the double stimulus of Federal spending and Building's optimism, the volume of both building permits issued and contracts awarded have defied seasonal trends, have jumped to their highest levels of the year. Permits advanced from \$140 million in June to \$198 million in July. Largely responsible was residential building, permits for which increased 79 per cent. The value of permits for non-residential construction rose 8 per cent, and those for repairs and alterations declined 5 per cent. July permits, \$66 millions greater than in July, 1937, were also greater than any month of last year.

Although contracts awarded for all types of construction increased in volume between July and August, largest advance was in heavy engineering construction. It increased 60 per cent. Contracts awarded for residential construction amounted to \$99.7 million and were 36 per cent above July; non-residential building increased 20 per cent. Combined total of \$313 million was higher than any month since July, 1937.

PERMITS



CONTRACTS



LIFE HOUSES. "Americans, though generally housed far less comfortably and happily than they could be, spend as much for radios alone as they do for building houses." Thus *Life* magazine fortnight ago prefaced 22 consecutive editorial pages devoted to the longest and strongest ride ever given home building and buying. Power behind this ride is generated by eight LIFE HOUSES designed by eight of the Nation's foremost architects* for *Life's* four "client families" representing income groups between \$2,000 and \$10,000. To each "client" was graphically presented two houses; one of traditional design, one of modern.

First step in a sustained drive to acquaint the public with a decade's development in home design, construction and finance and to touch off the long-awaited building boom, *Life's* pages included architects' drawings, photographs of the four "client families," text explaining in layman's language the various phases of the designs and, finally, discussion of financial facts, figures and procedure.

Avoiding like death the disastrous practice of tying definite price tags to its houses, *Life* stood apart from other magazines of general circulation, wisely designated its houses as being designed for certain income groups. *Life's* reason: "... building costs vary so widely in different localities, and depend so much on the quality of materials used."

Firmly tied to the program, however,

are merchandising mechanics for stimulating actual construction of the eight houses. Leading department stores throughout the country are selling colored cut-out models of the houses with furniture to fit, are planning model room and window displays and are pushing the program in local newspapers. Equally important, prominent subdividers are building authorized duplicates of the houses, working drawings for which are made available by *Life* at the architects' fees. Before the magazine went to press, authorization for 15 LIFE HOUSES had been granted—coast to coast.

Significance of the program has prompted THE ARCHITECTURAL FORUM, collaborator with *Life* in its presentation, to entitle its November issue "Life House Issue." In it Building will be afforded a behind-the-scenes view of the program—its inception, its development, its public reception, its results and a technical analysis of the design and construction of what now are the eight most talked-about houses in the U. S.

EIGHTY-NINETY. Becoming a little more cheery with each new record it establishes, the Federal Housing Administration finally has figures for the scoffers who months ago predicted that mortgages for more than 80 per cent of appraised value would never amount to much. Study of the agency's operations during March, April, May and June of this year reveals that 40 per cent of its commitments involved mortgages with a ratio of 80 per cent or above. Still more convincing was the record of commitments for strictly

new construction: 60 per cent of this type of business was in mortgages ranging between 80 and 90 per cent of appraised value.

Since FHA insurance of the 90 per cent mortgage was not authorized until early February, few commitments for loans of more than the previously authorized 80 per cent were made before March.

SIGNPOST. Size of the task before those who would rehouse the President's ill-fed, ill-clad and ill-housed third of the Nation was graphically outlined month ago when the National Resources Committee slid another of its significant reports through the White House mail slot—this time a hundred-page thesis entitled "Consumer Incomes in the U. S., Their Distribution in 1935-36." The poorest third of all U. S. families and individual consumers in those two years earned an average income of only \$471; and, applying the long-standing formula of one-fifth of monthly income equals maximum monthly rent, this group could not afford to pay more than \$7.80 per month rent. It is difficult to find and more difficult to build dwelling units that may economically be rented at such a figure.

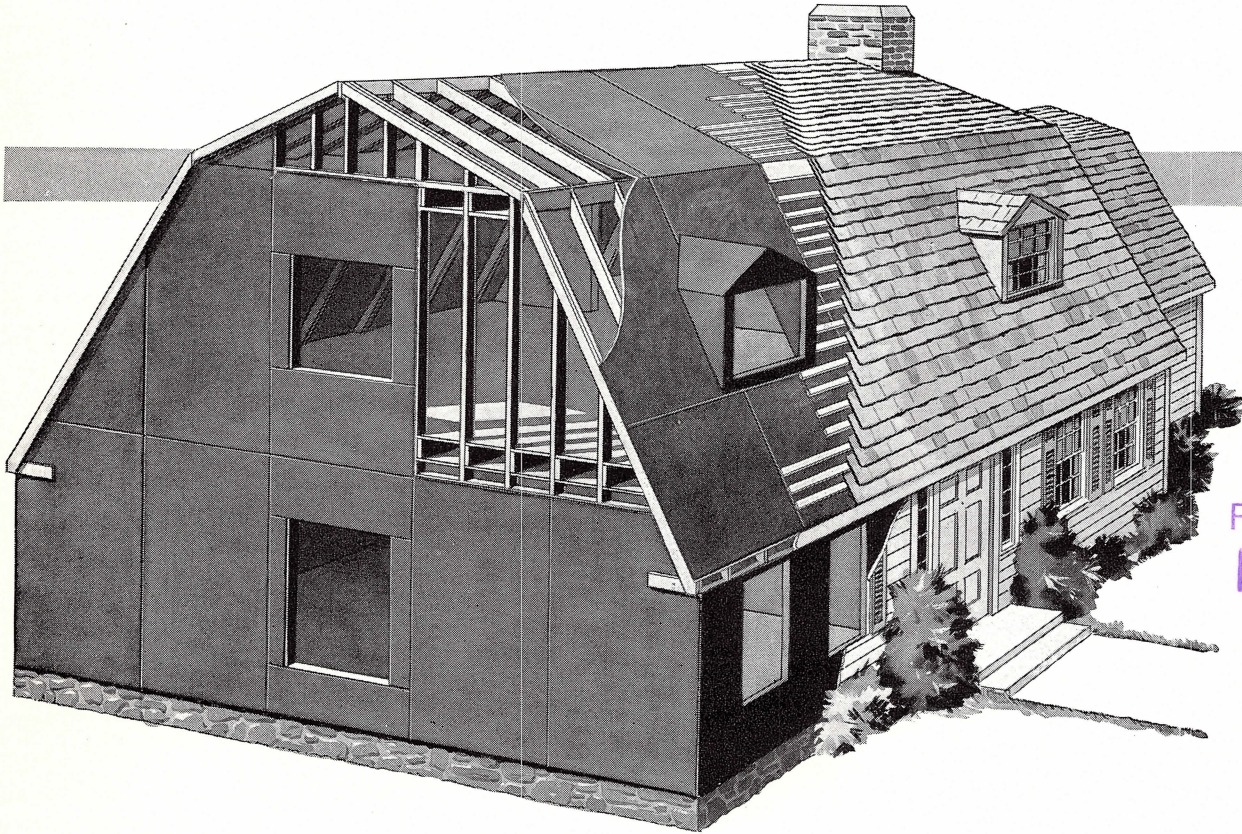
To build rental quarters for the Nation's middle third is easier but far from easy. It earned an average of \$1,076 a year during 1935 and 1936; therefore could theoretically afford to pay a monthly rental bill of \$17.90. If another axiom is dragged into the calculations—that not more than two and one-half times one's annual income should be spent for a new house—it is seen that the average home-seeker in

* Architects Aymar Embury II, Harrison & Foulhoux, H. Roy Kelley, Richard Koch, Edward D. Stone, Royal Barry Wills, William Wilson Wurster and Frank Lloyd Wright.

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VOLUME 69
Number 3

THE MONTH IN BUILDING

this group could not pay more than \$2,690. At today's prices, this amount will purchase little, if any, house.

Earning an average of \$3,000 per year, the upper third found it possible either to rent respectable rooms or build a home. Thus, according to the rules, its rent bill could go as high as \$50 per month, its house could cost as much as \$7,500.

Getting away from thirds, the average income of all the Nation's families was \$1,622, enough to allow only \$27 per month for rent or \$4,055 for building a new home. Also enlightening is the fact that approximately nine-tenths of the Nation's 39 million families and individual consumers (29 million of the former, 10 million of the latter) received less than \$2,500 per year. Such conditions clearly point to the importance of developing good low cost houses and low rental housing projects.

NOTHING DOWN. Minerva Homes, Inc. is a conglomeration of personages prominent in the development of New York's residential borough of Queens recently incorporated for the speculative construction of 250 houses. And while Minerva Homes, Inc. at mid-month had not even commenced construction of a single house, it had been flooded with more than a thousand inquiries regarding its projected subdivision. Reason: local newspapers headlined advance publicity releases with the eye-opening declaration that Minerva homes would be sold without benefit of down payments.

Although not the first to spring up since enactment of the National Housing Act amendments in February, Minerva's "nothing-down" plan has several unique features. Principal among them is a loan from the Federal National Mortgage Association which will cover 80 per cent of the development cost of the project. The 20 per cent balance is to come from the sponsors in the form of cash and land. Under the terms of the loan, the first to be issued by the FNMA, all finished houses are to be included in a blanket mortgage held by the Association.

When completed, houses will be offered to the public at an anticipated sales price of \$5,250 per dwelling. A purchaser may forego the customary down payment, but must make monthly payments of \$52.50. Being in excess of the customary payment required on a house of comparable cost, a portion of it is set aside each month in a fund held by the subdividers for each home purchaser. At the end of about three years, according to the plan, this fund will be large enough to cover the down payment required for a regular FHA-insured mortgage.

When this point is reached, the house in question is released from the FNMA's

blanket mortgage, and a new mortgage carrying FHA insurance is written. In effect, the house purchaser spreads the payment over a three-year period, adds these years to the period during which he must make monthly interest and amortization installments.

While there are wrinkles in the financing plan that must be ironed out before Federal sanction is forthcoming, its implications are colossal. In them may be found the basis for as great a revolution in home finance as came with Federal insurance of the 90 per cent mortgage.

BELLS AND WHISTLES. Housing developments have frequently made the front page of newspapers. Last month they made a press-radio news broadcast as well. Occasion was the announcement by Chairman Alfred Rheinstein of the New York City Housing Authority that the total cost of his Red Hook USHA project would be \$4.6 million under the \$16.6 million previously estimated.

Heady application of the principals of economic building (curtained alcoves supplant closets, linoleum-covered softwood floors supplant hardwood floors, six-story elevator apartments supplant four-story walk-ups, etc.) will shave actual construction costs to \$850 per room, total costs to \$1,125 per room. Including land, demolition and non-dwelling expenditures, the latter figure compares unexpectedly well with the \$1,250 limit set by law and the comparable \$2,284 cost per room of PWA's housing in the Williamsburg project.

Heads responsible for Red Hook's practical design and the resultant cost reduction are those of Chief Architect Alfred Easton Poor and his six associates: William F. Dominick, William I. Hohauser, Electus D. Litchfield, Jacob Moscovitz, Edwin J. Robin and Edmund T. See.

Day after the story of their achievement broke, the New York Times picked it up editorially, commented: "... this demonstration may be expected to help, not hurt, private housing. It should certainly give the limited dividend corporation a new lease on life. If these (cost) estimates are sustained ..., as one is sure they will be, the friends of decent housing can ring bells and blow whistles."

ON TIME. The house, its lot and its furnishings, figured in roughly 43 per cent of all installment buying undertaken last year by American families. Such, at least, is the observation of the Home Building and Home Buying Committee of the U. S. Building and Loan League, which goes so far as to estimate the total amount of monthly repayment credit granted for building and allied purchases at \$2,327 million—\$500 million more than the 1936

figure. The Committee's best guess is that \$1,400 million of the 1937 total went into mortgages on houses built and bought.

Interesting is the comparison between these figures and the volume of installment sales made by automobile dealers, which for 1937 was estimated at \$2,240 million.

COUNTIES. To combat the unhappy alternation of palatial country estates and wayside hot dog shacks, many States are giving increased consideration to the merits of county zoning. Last month Executive Vice President Herbert U. Nelson of the National Association of Real Estate Boards counted the States that have already zoned all of their counties, held up eight fingers. Also counted were seven other States which have enacted special laws giving this zoning power to certain individual counties. In still other States the counties themselves are assuming the zoning responsibilities.

In the latter category, for instance, is St. Louis County, Mo., which is currently taking steps to protect its large country residences from the deteriorating effect that low cost subdivisions might bring with them.

While county zoning ranks in age with city zoning, it is seldom discussed. Originally considered primarily as a method of governing the development of outlying metropolitan areas, it is being used to an increasing extent to control the use of land in those counties that are rural and want to continue rural.

In counting those States in which all counties are zoned, NAREB's Nelson found: California, Illinois, Indiana, Michigan, Tennessee, Virginia, Washington and Wisconsin. States in which only certain counties are zoned: Florida, Georgia, Kentucky, Maryland, Pennsylvania, Tennessee and Virginia.

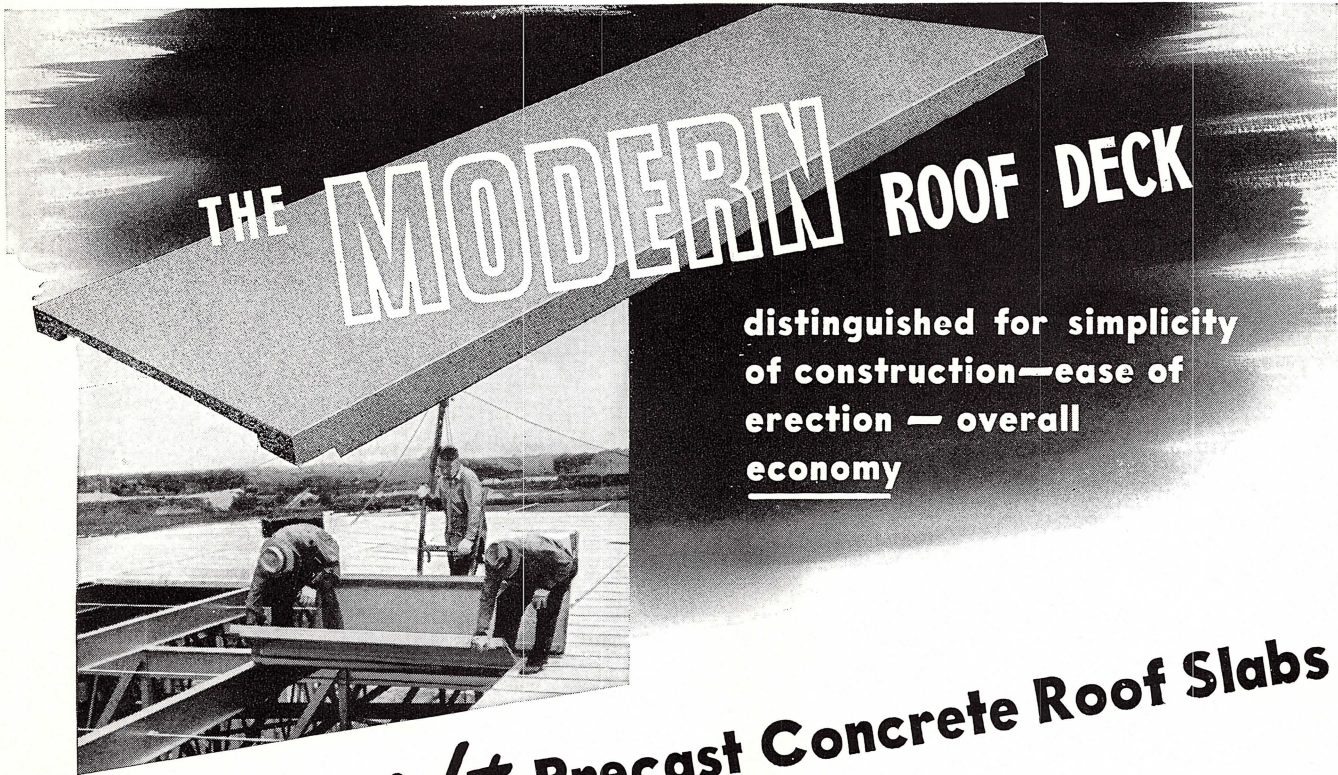
EARNINGS. Measuring the business recession of the first two quarters of 1938 are the earnings statements of eight building supply companies which reported last month. It is to be noted in the following tabulation of those companies that the period of earnings is not identical in every case.

Quarter ending June 30	1938	1937
Anaconda Copper		
Mining	\$4,010,463	\$19,127,994
Briggs Manufacturing .	947,448	5,928,670
Certain-teed Products.	82,969*	170,072
Formica Insulation ¹ ..	1,129	129,277
Gar-Wood Industries ¹ .	46,473*	452,613
Kennecott Copper ¹ ...	8,238,985	26,751,950
Reynolds Metals ¹	305,769	1,123,636
L. S. Starrett ²	465,283	771,091

* = Net loss

¹ = 6 mos. ending June 30

² = Year ending June 30

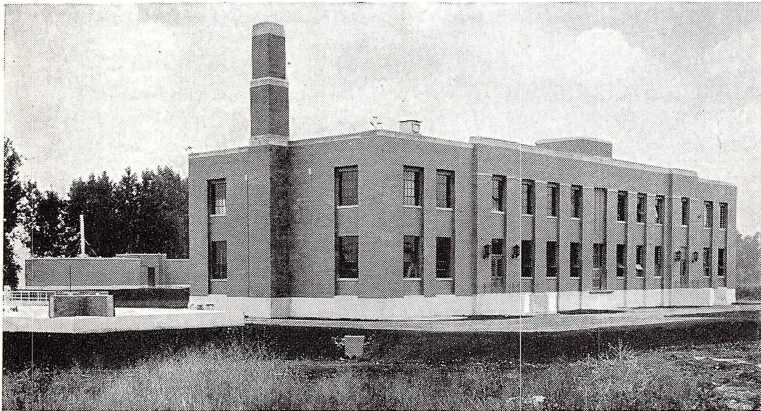


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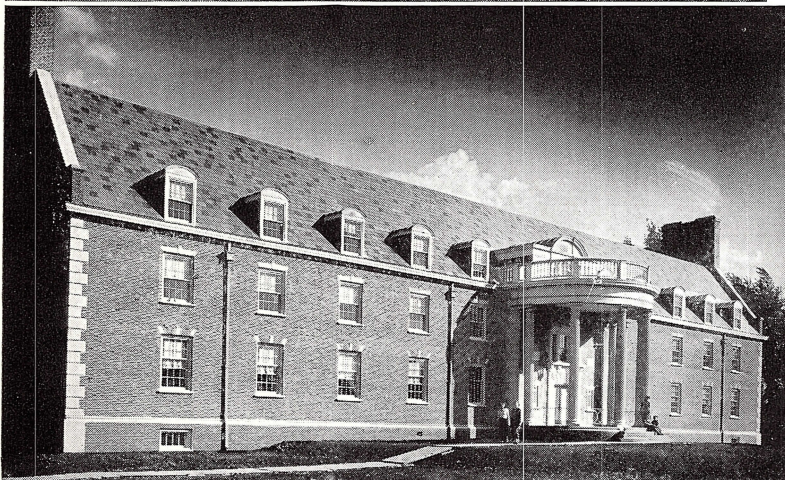
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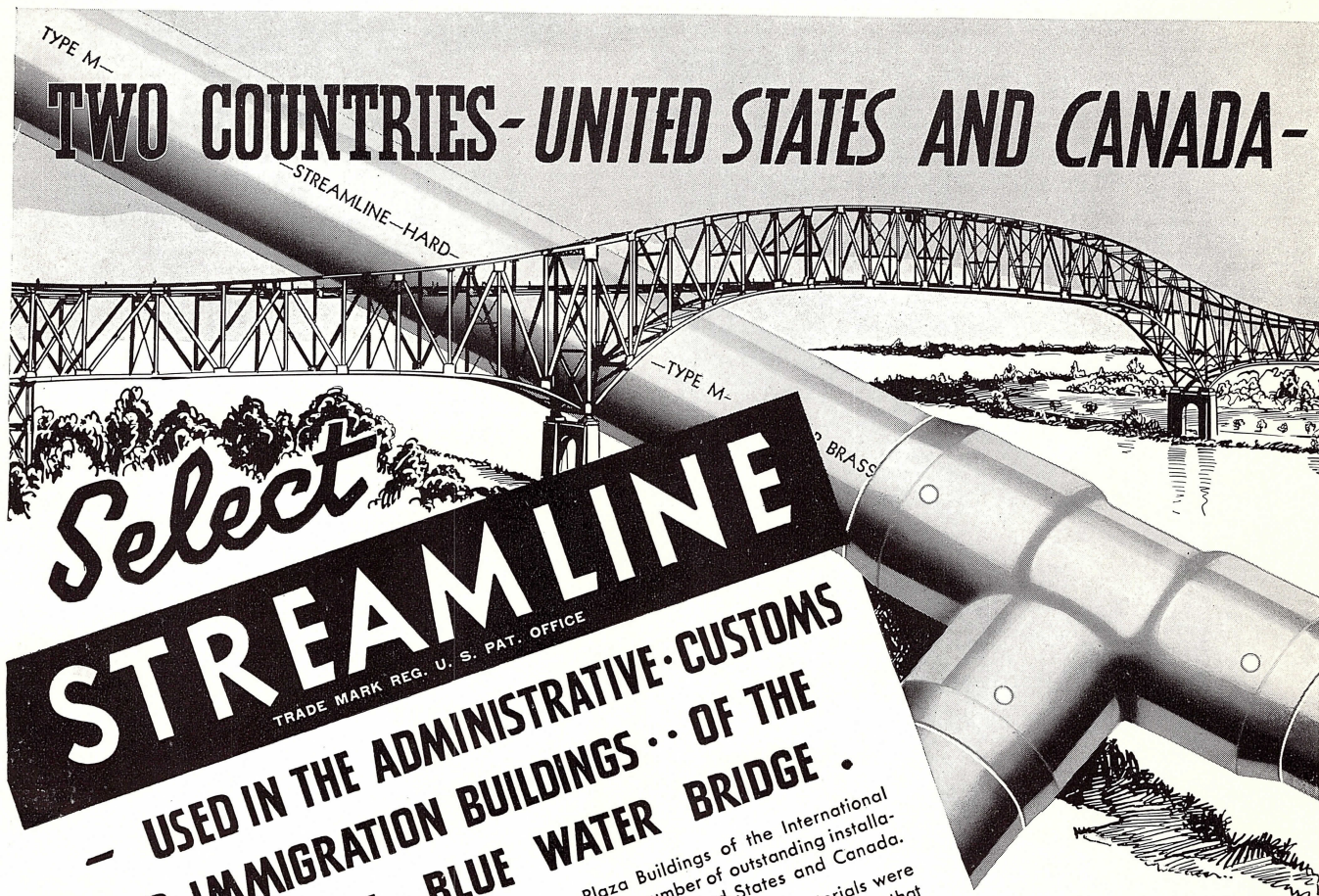
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The Blue Water International Bridge between Port Huron, Michigan, and Sarnia, Canada, is 1,576 feet long and 150 feet above the river level.

The total length of the bridge, including approaches, is 8,020.94 feet.

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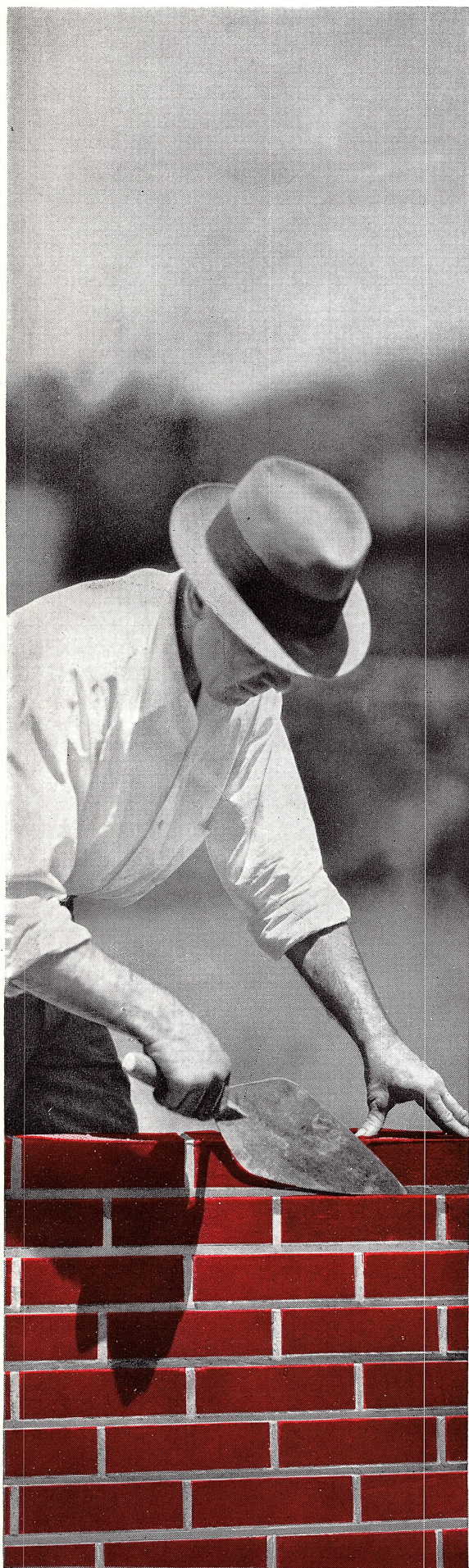
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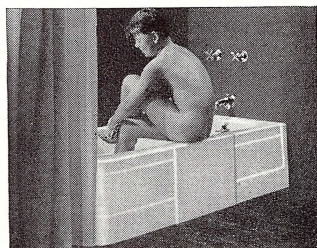


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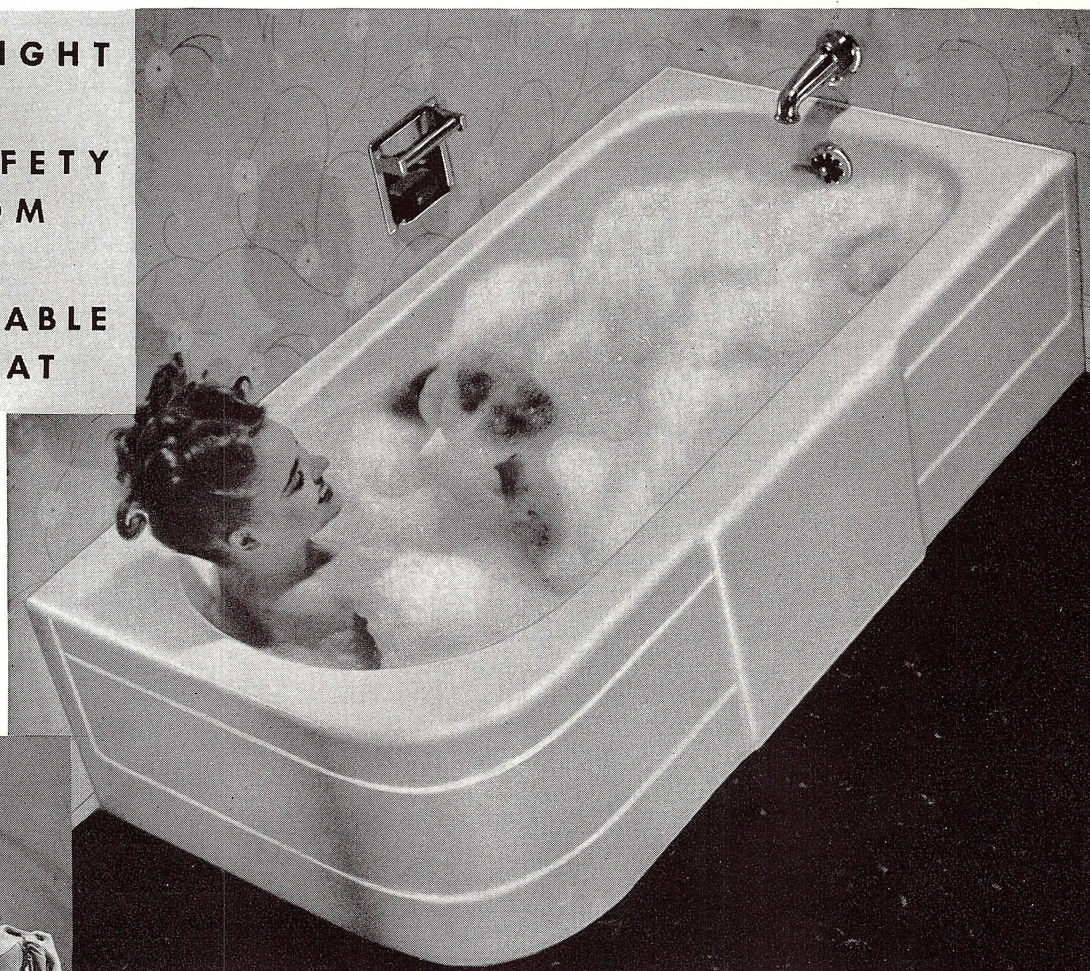
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•
FLAT SAFETY
BOTTOM
•
COMFORTABLE
RIM SEAT



Low height, only sixteen inches, means greater ease in stepping in and out.



Wide front panel provides a comfortable seat. Convenient when dressing or when foot bathing.

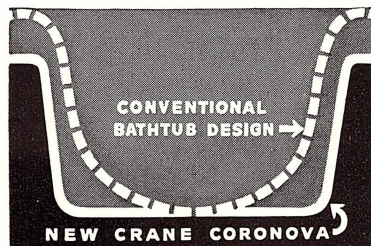


FOR the bathroom in the modern home, the Crane *Coronova* offers architects a bathtub, new in design—streamlined in appearance—comfortable, safe—ideal for either a tub bath or shower.

Its low height, only sixteen inches from floor to rim, makes it easy to step in and out, and the wide, flat bottom lessens the danger of slipping—adds to the pleasure of a shower. This new tub

has an interesting panel design that adds to its distinctive appearance and serves a functional use as well, for it forms a flat, comfortable seat at the rim of the tub which is so convenient for foot bathing or when dressing.

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A NUMBER OF FUNDAMENTALS CONCERNING AIR CONDITIONING AND REFRIGERANTS

IF the air conditioning installation is a sizable one involving a duct system, the duct system should conform to the rules published by the National Board of Fire Underwriters in NBFU Pamphlet No. 90 entitled, "Regulations of the National Board of Fire Underwriters for the Installation of Air Conditioning, Warm Air Heating, Air Cooling and Ventilating Systems" (July 15, 1937). These regulations are published by the Board at 85 John Street, New York City, or 222 West Adams Street, Chicago. See Paragraph 191 covering refrigerants and specify condensing equipment for permissible refrigerants.

If the system is a small commercial or air conditioning installation containing not over 100 pounds of refrigerant, design to conform to the "Standard For Air Conditioning and Commercial Refrigerating Equipment" (Subject 207, June 16, 1937)

of Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago. See Paragraphs 36 and 37 and draw specification for air conditioning refrigerants in accordance.

Should your client desire a unit system containing not more than 20 pounds of refrigerant, Underwriters' Laboratories, Inc., have a "Standard For Unit Refrigerating Systems" (Subject 207, June 15, 1937). Secure a copy of this standard and consult Paragraphs 29 and 30 for permissible refrigerants for air conditioning.



FREON

REG. U. S. PAT. OFF.

safe refrigerants

***Freon** is Kinetic's registered trade mark for its fluorine refrigerants.

If you desire to consult Underwriters' Laboratories Report MH-2375 entitled, "The Comparative Life, Fire and Explosion Hazards of the Common Refrigerants," enquire at the reference desk of your Public Library. Or we will mail a copy, postpaid, on receipt of one dollar.

By following these rules, you avoid any possibility of penalty to your client in insurance rates for using refrigerating and air conditioning systems in non-conformance with regulations.

If you would be safe respecting refrigerants, specify the safe "Freon" refrigerants for air conditioning, which meet all the specifications of the National Board of Fire Underwriters and the Underwriters' Laboratories, Inc.

"Freon" refrigerants are non-toxic, non-flammable and non-injurious to foods, furs, books, paintings and other fragile and perishable articles.

KINETIC CHEMICALS, INC., TENTH & MARKET STREETS, WILMINGTON, DELAWARE

Now—
a firesafe
hollow
partition

*that saves construction time
and costs for your clients*

—with the new embossed, truss-design
MILCOR Steel Stud

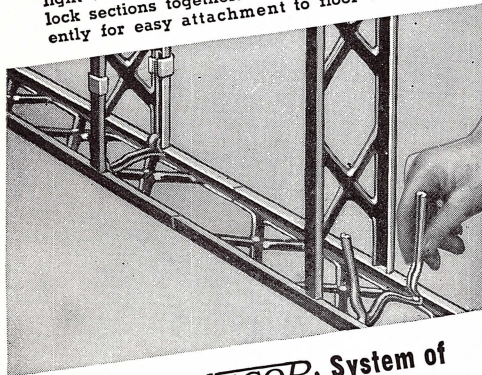
(Patent Applied for)

Your client appreciates this sound, money-saving construction — your contractor, the ease of installation . . . The new embossed, truss-design stud serves a three-fold purpose — as *studding*, *ceiling runner*, and *floor track*. With only one standard unit to consider, you eliminate confusion with materials and save time on the job. Patented shoes slip quickly into place, making firm attachments of the upright member to the ceiling runner and floor track.

Designed to combine light weight with functional strength, Milcor Steel Stud permits easy installation of conduits, pipes, etc. It is quickly cut to length on the job, or prefabricated if required. It is firesafe, permanent . . . There is no muss to clean up when the job is completed — and *cleaning up costs money and causes arguments* somewhere along the line . . . Milcor Steel Stud — the newest product in the Milcor System of Fireproof Construction — is engineered to produce, with Milcor Metal Lath, the finest, firesafe hollow partition possible today — a lasting guarantee of fine construction and a satisfied client . . . Investigate the new Milcor Steel Stud. Write for the Steel Stud folder.

F-31

Truss design produces maximum strength with light weight. Patented shoe and wedge quickly lock sections together. Holes spaced conveniently for easy attachment to floor or ceiling.



Unit of the **MILCOR** System of
Fireproof Construction

MILCOR STEEL COMPANY

MILWAUKEE, WISCONSIN

CANTON, OHIO

Chicago, Ill. Kansas City, Mo. La Crosse, Wis. Atlanta, Ga.

**Sanymetal provides a type of toilet partition particularly suitable
 FOR CREATING A MODERN TOILET ROOM ENVIRONMENT
 in public and semi-public buildings**



THE SUITABILITY, CONVENIENCE and utility of toilet rooms necessarily varies with the function of the building. To Sanymetal Engineers, qualified by thousands of installations of Sanymetal Toilet Partitions, the differing characteristics of toilet room environments in different types of buildings are known and acknowledged. Sanymetal has developed several standard types of toilet partitions which it offers for meeting the wide variety of needs occurring in various layouts and types of buildings. Sanymetal Flush Type and Full Panel Toilet Partitions with baked-on enamel finishes are still unmatched for sound mechanical construction and restrained design. Sanymetal Porcena and New Postless

Type Toilet Partitions offer the ultimate in smartness, in permanence of finish, and in sanitation. ★ Simplicity of design, which characterizes all types of Sanymetal Toilet Partitions, is a feature which makes them as adaptable for modernizing existing toilet rooms as for new installations. The Sanymetal Representative nearest you will be glad to offer you suggestions on modern toilet room environments in old as well as new buildings of every type. See Sanymetal Catalog in Sweet's, or write for colorful brochure featuring modern toilet room environments.



Sanymetal

TOILET AND OFFICE PARTITIONS

THE SANYMETAL PRODUCTS CO., INC.
 1687 Urbana Road, Cleveland, O.

Sanymetal's Catalog is contained in Sweet's for 1938 identified as catalog 20/24.

Guinea Pig Houses



In the architect's code of ethics, there is no need for a commandment saying "Thou shalt not experiment with thy client's money." No need—because architects have an instinctive aversion to using the houses they build as guinea pigs.

Dutch Boy ceased to be an "experiment" many years ago. Today, anyone with any questions about Dutch Boy will find them answered by millions of successful paint jobs. No paint made anywhere has ever given a more convincing demonstration of complete dependability.

Every application of Dutch Boy

White-Lead is a custom-made paint job—mixed to suit the special requirements of the surface to be painted—tinted to the exact shade you and your client desire. By specifying Dutch Boy White-Lead you secure that combination of beauty and durability which is a fundamental objective of good architecture.

NATIONAL LEAD COMPANY

111 Broadway, New York; 116 Oak St., Buffalo; 900 West 18th St., Chicago; 659 Freeman Ave., Cincinnati; 1213 West Third St., Cleveland; 722 Chestnut St., St. Louis; 2240 24th St., San Francisco; National-Boston Lead Co., 800 Albany St., Boston; National Lead & Oil Co. of Penna., 316 Fourth Ave., Pittsburgh; John T. Lewis & Bros. Co., Widener Bldg., Philadelphia.

DUTCH BOY WHITE-LEAD

Good Paint's Other Name

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A Westinghouse specification has other advantages besides dependable service and one source

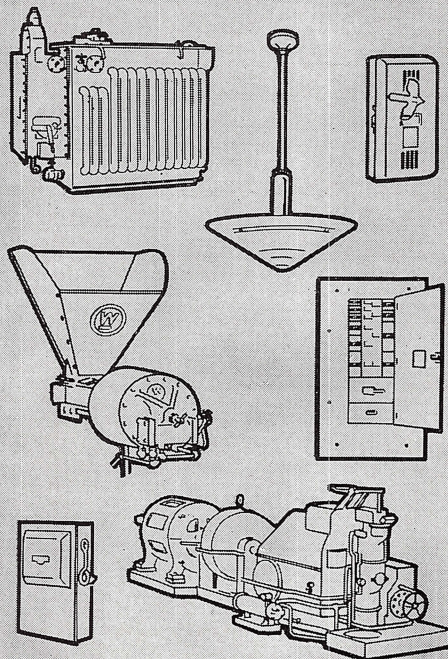
of responsibility. Electrical products are closely interrelated. Hookups in which each product depends upon many others, call for equipment that operates as a unit. Westinghouse products for the building industry are designed and built for teamwork.

For every kind of electrical advice, call local Westinghouse Engineers or write Westinghouse Electric & Manufacturing Co., Dept. 7-N, East Pittsburgh, Pa.

Ask for your copy of the Architects' and Engineers' Data Book, containing helpful information on electrical products for buildings. See Catalog in Sweet's.

J-93810

A FEW TYPICAL PRODUCTS
IN THE COMPLETE WESTINGHOUSE
LINE FOR THE BUILDING INDUSTRY



Westinghouse

*Electrical Partner of the
Building Industry*





CITY PLANNER Carlos Contreras, President of the Organizing Committee in Mexico City, officially welcomes the delegates.

To Mexico City came delegates to the 16th Congress of the Federation for Housing and Town Planning. Ten days (seven sessions, eight excursions and one reception) later, they went home with the general feeling that from a technical standpoint the meeting was not particularly noteworthy, but that Mexico was fine.

First sessions devoted to Underground Planning were uniformly conceded to be too specialized and technical, but proved of particular interest to representatives from Mexico City. Some of its biggest buildings are settling to an alarming extent, affecting not only the structures but often dislocating sewage lines, water mains and other conduits.

Easily the most spirited session was that devoted to Housing in Tropic and Subtropic Countries. Reports generally agreed: 1) that housing in tropic and subtropic colonies is the public responsibility of the parent government, 2) that further research is needed in problems of sanitation, ventilation, protection from

hurricanes and termites.

On the equally important subject of Planning, Recreation and the Use of Leisure Time, U. S. delegates contributed most, pointed out that providing plenty of open space was not enough. Some of the area had to be so arranged that it could be supervised and maintained by regular recreation authorities; some of it had to be so related to the houses that it could be used for gardening and otherwise kept up by the tenants. Only in these ways would genuine recreational opportunities be provided.

Last, but by no means the least important session, was that devoted to National Planning. Dr. Charles E. Merriam, member of the U. S. National Resources Committee and Head of University of Chicago's Political Science Department, stressed strongly the non-technical aspects of broad planning, a new note in the discussions of the Federation.

A round-table discussion on the subject of Town Planning Education brought forth



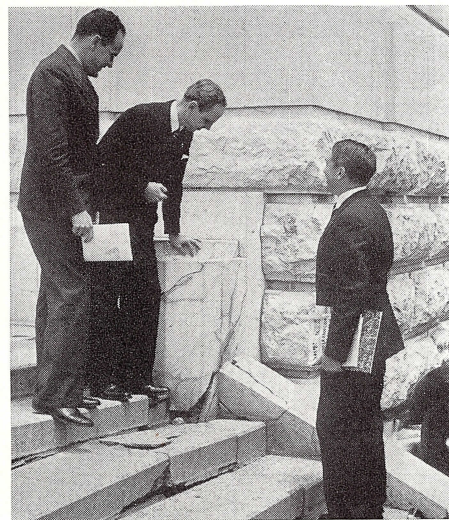
A. I. A. DIRECTOR John R. Fugard of Chicago, and Architect Atlee B. Ayres of San Antonio, Texas, discuss excursion plans.



SMARTEST AFFAIR of the Congress was the reception staged by Foreign Affairs Secretary Eduardo Hay, attended by Mrs. Colean and Miles Colean (FHA), Tracy Augur (TVA), Patrick Cumming and Alberto Misrachi.



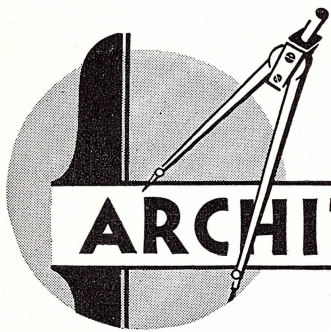
NORTH MEETS SOUTH. Swedish Delegate Goran Sidenbladh with A. G. Harper, representative from New Zealand.



DELEGATES Coleman Woodbury (NAHO), Miles Colean (FHA) and Warren Vinton (USHA) examine damage due to settling.



DELEGATE MORIZET of France and Walter H. Blucher, executive director of the American Society of Planning Officials "parle."



ARCHITECTURALLY SPEAKING

by OTIS ELEVATOR COMPANY

Recently some one asked us why we talked to architects about elevator maintenance. The answer, of course, is simple. Today, more than ever before, architects want to know all they can about cost of up-keep as *part of the total cost* of building equipment and materials. And we know that in discussions on specifications with clients, the architect is expected to be intelligently informed on a wide range of maintenance subjects.

Elevator maintenance is as much a specialized art as elevator design and manufacture. It is the essence of transportation. But to put a definite value upon any of the commoner methods of transportation is not an easy thing to do. Most of us tend to undervalue them — until, for one reason or another, they stop or break down. Steady, reliable transportation facilities have an intangible value that defies computation in dollars and cents.

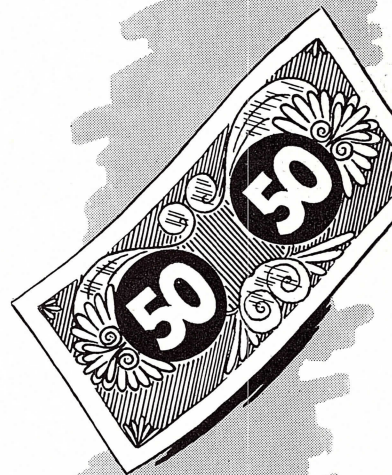
However, we know of two companies that have put a definite value on their elevator service. One large chain of department stores would rather pay \$50 in overtime than have an elevator shut down for one day. On this basis, it would value the service of a bank of four elevators at a minimum of \$200 a day.

A large grocery chain figures the value of each warehouse elevator at \$40 an hour. There, a breakdown means trucks held up, employees idle, and sales lost because of late deliveries.

One of the first annoyances that breeds dissatisfaction among tenants of apartment houses and office buildings is faulty elevator service. The success of many buildings is in direct proportion to the efficiency of their elevators. Otis Maintenance is the best insurance against this kind of dissatisfaction.

In planning a building which will contain elevators, *total cost* should be considered — that is, first cost *plus* the cost of up-keep. A few extra dollars spent for more modern and efficient equipment will be more than justified by the better service rendered and the savings in up-keep.

RETURN TO
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DEPT.



LETTERS

Allen's Front Porch Campaign

Forum:

Is the front porch doomed?

I have been pondering this question since returning from a visit to Mackinac Island. The Grand Hotel on Mackinac Island has the longest front porch in the world; it is a quarter of a mile long, according to my carriage driver, and it is impossible for any carriage driver on the island to be mistaken on such a point because you cannot become a member of the Carriage Drivers Association until you have passed an examination on the history of the island and similar knick-knacks. Besides, there is a sign on the front porch reciting the fact that Mr. Robert Ripley himself asserts that the front porch of the hotel is a quarter of a mile long.

This is considerable porch. Allowing 2 ft. per rocking chair, and assuming that there would be eight lines of chairs, this would add up to no less than 5,280 women sitting in rocking chairs at one time, rocking and cutting up a few old touches regarding their past operations and obstetrical exploits. Having figured this out I left Mackinac Island hurriedly and went to Newberry, Mich., in the upper peninsula. It was 79° F. in Chicago that August day, but in the vicinity of Newberry it was so cold that I frequently had to blow my horn vigorously to induce dog sleds to pull over to the curb. I was driving around in a new Ford; most architects drive around in a Stupor, with one cylinder missing.

I repeat; is the front porch doomed?

Did you know that in Sault Ste. Marie, Mich., there is an establishment known as the Flirting Duck Fruit Market? And that near Traverse City, Mich., there is a dance hall called the Shin Tangle? And that in Wisconsin Dells, Wis., you can buy genuine Indian miniature birch bark canoes made in Japan?

The way I look at it, front porches have been the victim of insidious foreign propaganda. As long as an American had a front porch to sit on he was reasonably satisfied with the government, or if he wasn't, he didn't do anything about it, except rock a little harder. What have we now? No front porch, that's what we have. Or haven't. We, or us, architects are to blame for this. It was very difficult to draw front porches, especially the kind with turned balusters, and when I was a young draftsman, in the fall of '66, my fingers would become very numb from drawing them, as I well remember. My memory is phenomenal; I can remember way back when it took days to find either a four-leaf clover or a Democrat.

So when foreign spies offered all we architects Russian gold to leave front porches off houses we were easy prey.

I forgot to tell you that Portage, Wis., is the home of the old German who remarked, "No, we didn't put up any sauerkraut this year; except just a couple of barrels in case of sickness."

And then these alien agitators bribed architectural magazines not to print photos of houses with front porches. That is why you see the editors of architectural magazines walking around wearing their Sunday suits every day and eating meat three and even four times a week.

If the federal government knows what is good for it they will launch the Preserve Our Porches (or POP for short) administration immediately and hire me at a princely salary to wage unceasing warfare against forces that stoop to besmirch the stoop. Up, America!

ROGER ALLEN

Grand Rapids, Mich.

Standardized House

Forum:

Any addition to so thoroughly competent an article as "The Standardized House" seems superfluous. One idea, however, seems worthy of emphasis: that the fear of standardization is not as important as the fact that nobody knows what to standardize, or how. Our age has too much architectural history at its disposal, and too many technical resources; it is hard not to follow the easy course of making something look like anything else. And I suspect that exhortation will not wholly keep us off that course. . . .

T. H. BIGGAR

Miami, Fla.

Forum:

Permit me to extend my heartiest congratulations through you to the author of "The Standardized House" which appeared in your September issue. The clear and forceful logic of this article was equalled only by the refreshing and impressive manner of its presentation. Indubitably its author has gone far to formulate and establish several basic principles of domestic design. . . .

D. G. W. McRAE

Toronto, Ontario.

Progress for "Century"

Forum:

. . . I went out to Chicago on the last trip of the old Century and had a single room. The water level route jounced me around quite a little, as it always does. I had one of the most overpowering braces of planked chops I've ever seen (in my

room) and, as usual, waited half an hour for the dessert I didn't particularly want. Everything seemed to be in good working order, however and all in all it could be labeled an uneventful trip—on time.

About ten days later I came back on the new Century, also in a single room, only on the new Century it's a Bedroom. As I was pretty early for the train I took the chance to look it over while it was standing still. But as I walked down the platform the engine seemed a mile away so I thought I'll wait till I get to New York to look at that, and got on the train at a dining car. As I walked through I peeked into the very handsome and be-moneled galley (or whatever you call it on a train). As I turned I said to the uniformed waiter (or whatever you call him on a train), "I suppose you'll be glad when this train is old and people stop sticking their noses into everything." He looked resigned and said, "No, ma'am, it isn't that, but we'll be glad when it's old and we know how to work everything." I wonder how he feels when the "dining car, simple, dignified and pleasing by day becomes a night club with gay appeal after dinner. . . . Swing music, colored lights, circular tables. . . ."

And so on through roomette cars, etc. into my blue and gray Bedroom. Very restful and nice, but I miss one thing the bedrooms had on the old train. There was no nonsense about the toilet. It just stuck out and was covered with an upholstered seat and made a perfect foot rest when one was sitting by the window. But nothing so vulgar on the new Century!

I was just getting my numerous magazines piled beside me so I could really enjoy looking out the window when there was a knock on the door. We were doing about sixty then and I screamed "Come in." Another knock. Another scream. Another knock. A bellow. And then the colored maid came in with the hat bag. So we made the obvious remark about how hard it was to hear with the train making all that noise and I said, "They missed one thing. They should have put in a button that would open the door." The maid threw up her hands and her eyes and said, "Lawsy me, honey (honest she did) just one more thing on this train and we'd all go crazy."

So came dinner time. You still write the same old order on the same old pad. My old and slightly jittery porter came in to put up the table. The first one just plain didn't fit, so he went away and got another. It looked as if it maybe would

(Continued on page 74)



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Made in 6 sizes



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CELLAR DRAINER**
(Water or Steam operated)
Made in 6 sizes

Copper and Bronze
Throughout



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Thrifty

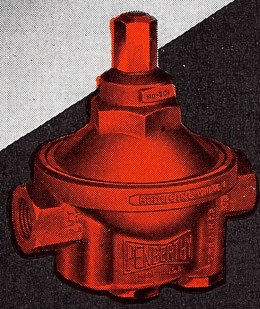
YOUR client gets a superior product at an attractive price when you specify one of the units shown above to keep his basement free from seepage water—or the specialties shown below to modernize his hot water heating plant. Thrifty clients particularly appreciate these thrifty products.


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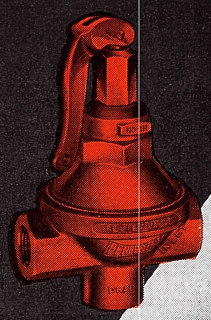
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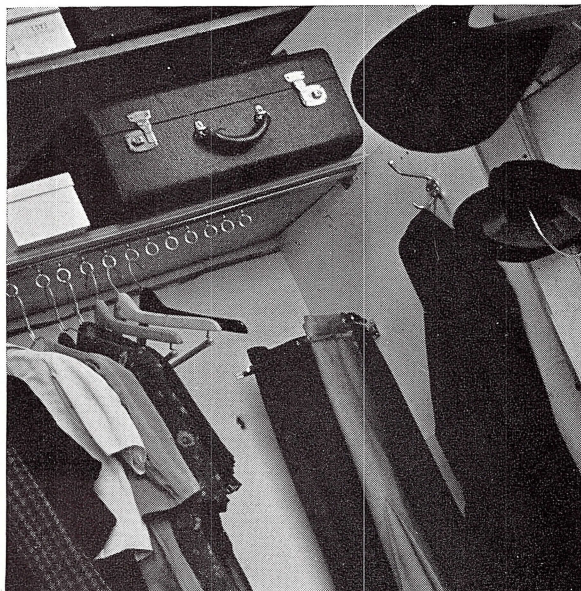
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MAN OF THE MONTH . . . Indiana's dollar-a-slum man (page 299)

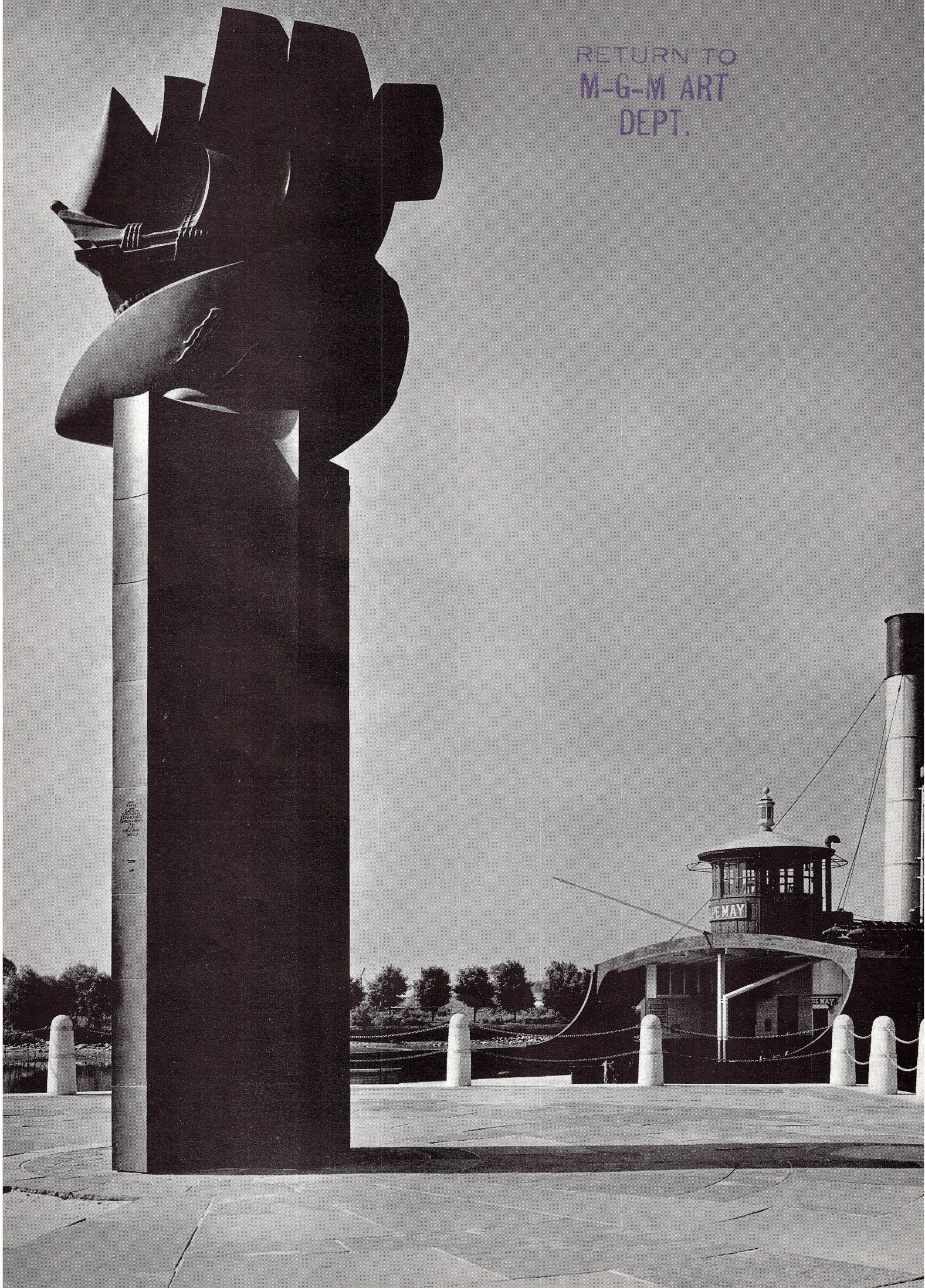


BUILDING OF THE MONTH . . . here architecture had to work (page 248)



PRODUCT OF THE MONTH . . . palliative for No. 1 pet peeve (page 295)

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CARL MILLES adds to the formidable sum of America's indebtedness to his art in this monument at Wilmington, Delaware. Through the generosity of the Swedish people, their sculptor and ours has had carved out of black Swedish granite this sturdy shaft upholding the *Kalmar Nyckel*, on the prototype of which the Swedish settlers arrived to make their new home in America. The landscape architects, Wheelwright & Stevenson, have developed for the sculpture in Fort Christina State Park a setting that is marked by a vigorous simplicity and an absence of petty detail. The limited extent and awkward shape of Fort Christina State Park undoubtedly offered grave difficulties to the landscape architects, permitting, however, the long vista along the flagstone walk in which the monument itself would eventually be framed by sweetgum trees.

Robert M. Damora Photos



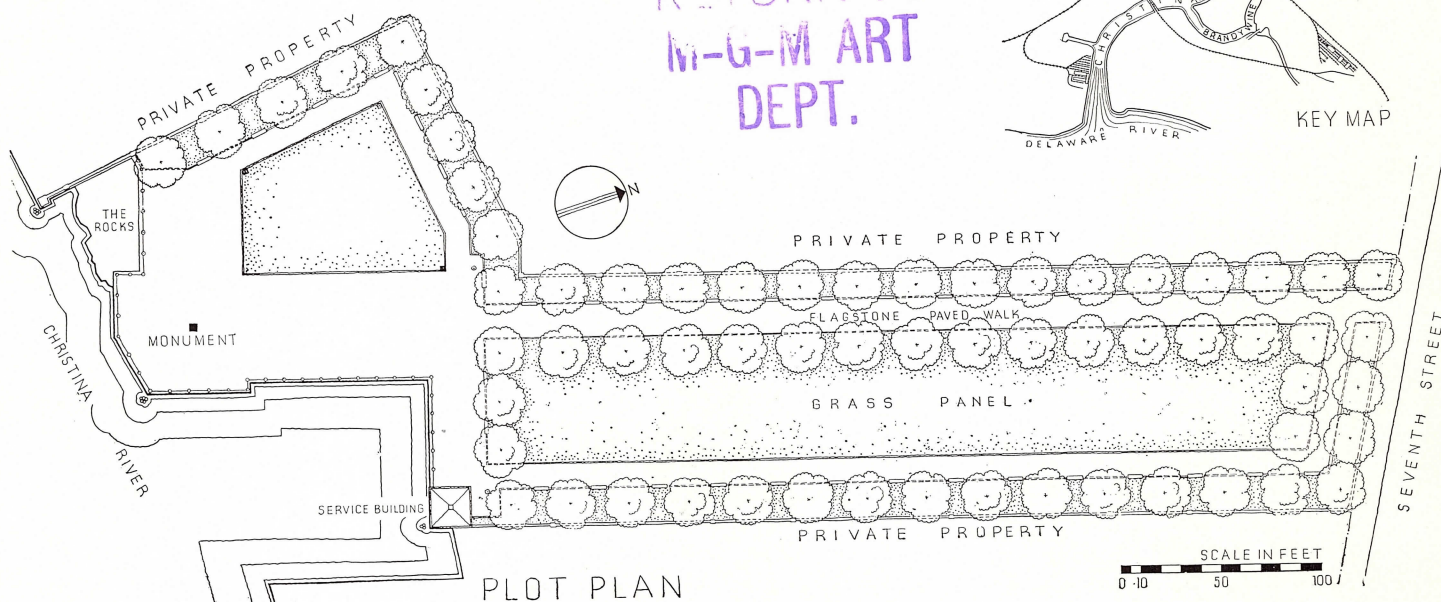
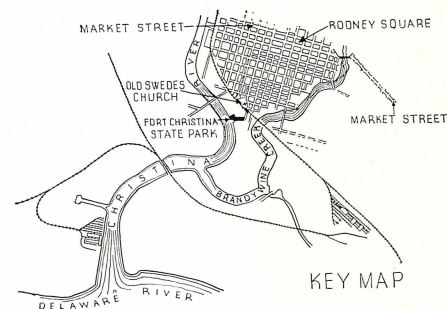
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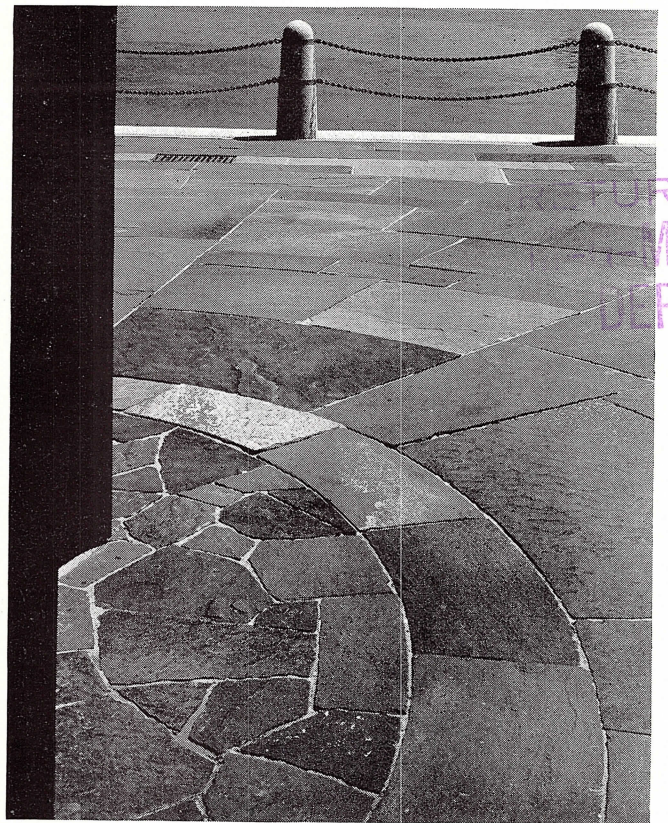
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A HIGH brick wall serves the purpose of screening the Park from neighboring private properties. Its oversize brick recalls the varied color of the old Williamsburg brickwork. Harmonizing with these long walls is the sea wall and bulkhead for which pink granite has been employed, repeating the base course for the brickwork. The chains between the sea wall uprights are cadmium plated and suspended between bronze rings. Pennsylvania flagstone is laid in rather large units on a sand cushion with narrow sand joints. For plant material, the landscape architects have limited themselves to the use of turf and the sweetgum tree.

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Robert M. Damora Photos

CHILDREN'S BEACH HOUSE, LEWES, DELAWARE

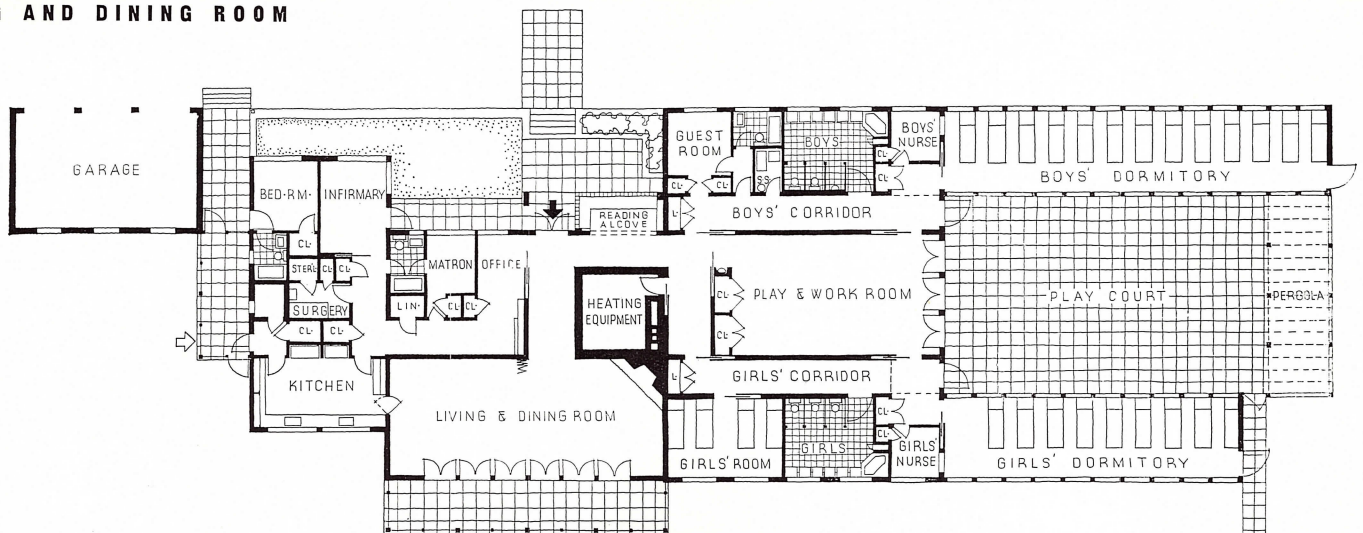
VICTORINE & SAMUEL HOMSEY, ARCHITECTS

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HUGGING the beach and sand dunes with its 209 ft. of length, here is a summer home for crippled children. As will be seen in the assembling of varied provisions in the plan, the home is designed for living as well as for work and play. Worthy of particular study is the integration of space providing for these three essentials without the overbearing suggestion of institutional character. The corridors are wider than usual so as to provide easy circulation for the children, nurses, and wheeled chairs, with an ample use of sliding doors to keep these traffic lanes unobstructed. The play court, completely enclosed at sides and ends, but open to full sunlight and air, is an important element. Both girls' and boys' dormitories may be indefinitely extended to allow for additional beds without involving other expensive additions. Ingenuity is shown, among many instances, in the combination of living room fireplace with the brick-walled heating room as a provision against fire hazard in a structure otherwise built of wood as necessitated by a limited budget. Not only architecturally pleasing, but of practical utility in the event of sudden squalls, is the broad overhang of the eaves sheltering the clerestory windows of the work and play room.



LIVING AND DINING ROOM

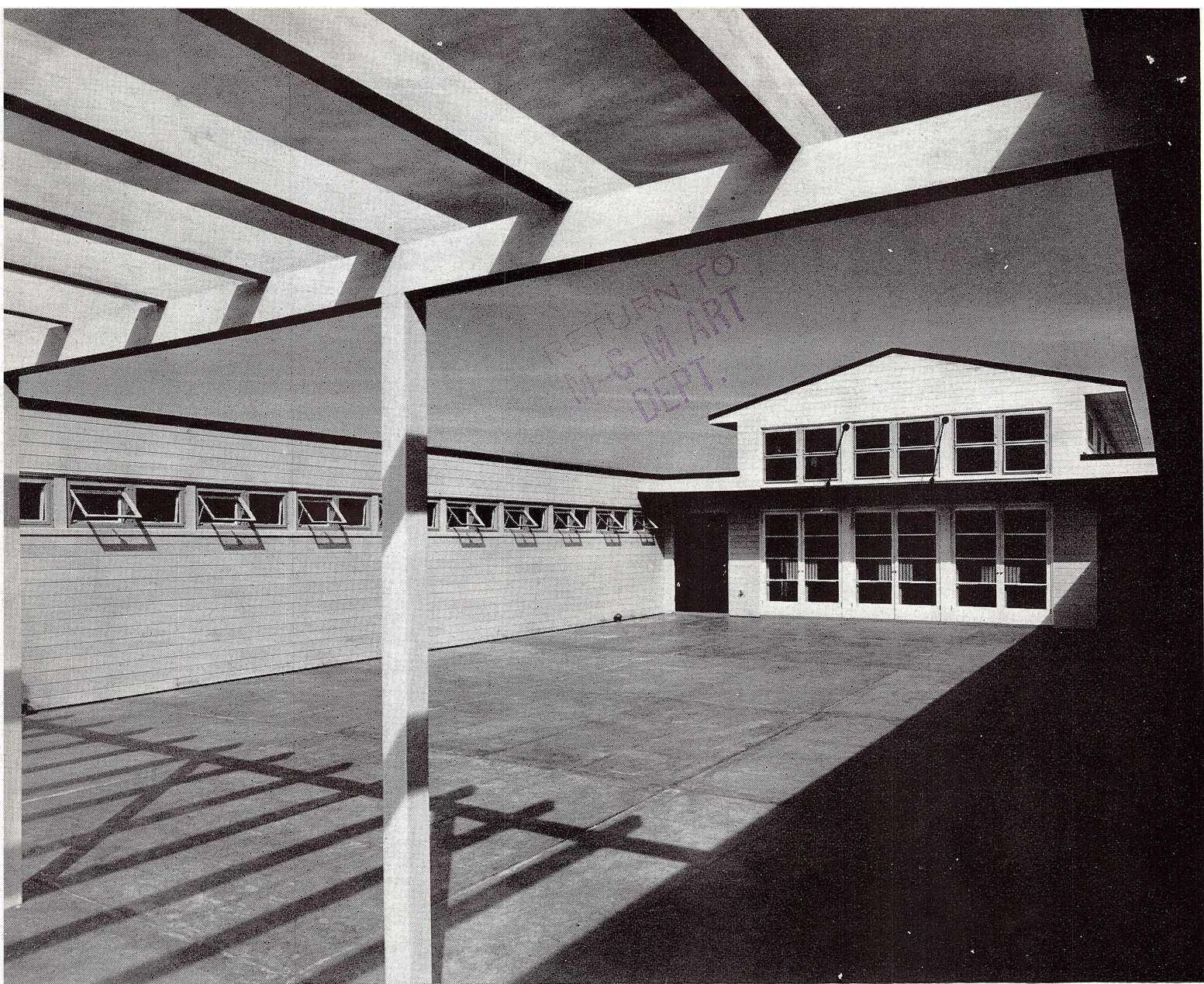


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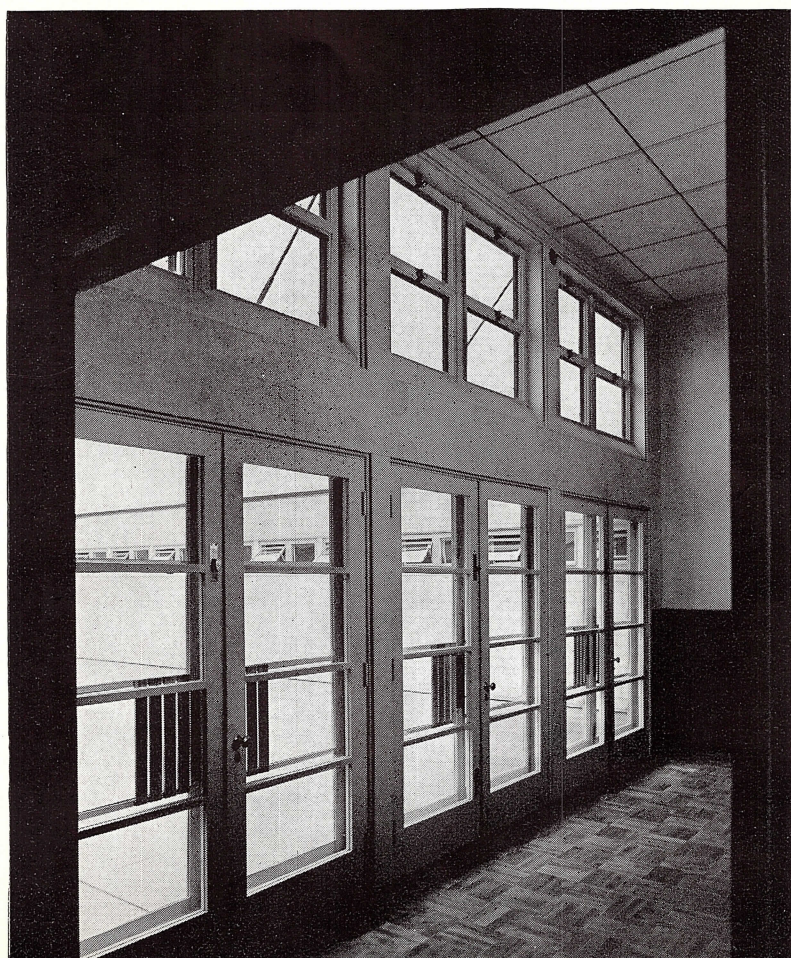
FLOOR PLAN

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WOOD RAMP
TO THE BEACH



PLAY COURT AND PLAY ROOM



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ABOVE is the play court, paved with colored cement marked off in 2 ft. squares with the high work and play room opening upon it at the far end. At left, the same end of the work and play room from inside. At top of opposite page, one of the dormitories, well shaded and well lighted by high windows hinged at the top to open out.



CHILDREN'S BEACH HOUSE, LEWES, DELAWARE

VICTORINE & SAMUEL HOMSEY, ARCHITECTS

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DEPT.

CONSTRUCTION OUTLINE

FOUNDATIONS: Footings—continuous reinforced concrete.

STRUCTURE: Exterior walls—flush cypress siding, building paper, diagonal sheathing and Steel-tex lath and plaster on 3 x 4 in. studding. Interior partitions—3 x 4 in. studs, Steel-tex lath and plaster. Steel-tex lath, type A, Johns-Manville. Floor construction—reinforced concrete slab on concrete joists, Lith-I-Bar, Formigli Corp.

ROOF: Wood rafters, 2 in. Celotex, The Celotex Corp., Barrett Co. 5-ply built-up roof.

SHEET METAL WORK: Flashing—20 gauge lead-coated copper, Revere Copper & Brass Co.

GENERAL CONTRACTOR: ROBERT ENGLER, INC., WILMINGTON, DEL.

WINDOWS: Sash—projected steel, Truscon Steel Co. Glass—double strength, clear, American Window Glass Co. Screens—top hinged, Truscon Steel Co.

FLOORS: E. L. Bruce Co. mastic blocks of maple on concrete throughout. Bathrooms—cement. Kitchen—asphalt tile, Johns-Manville Co.

WALL COVERINGS: Bathrooms— $\frac{1}{8}$ in. enameled fiber board, Johns-Manville Co. Heater room— $\frac{3}{16}$ in. asbestos Flexboard.

WOODWORK: Trim—wood. Doors—wood; interior flush, exterior glazed, Morgan Sash & Door Co. Garage doors—overhead type, Better Built Door Co.

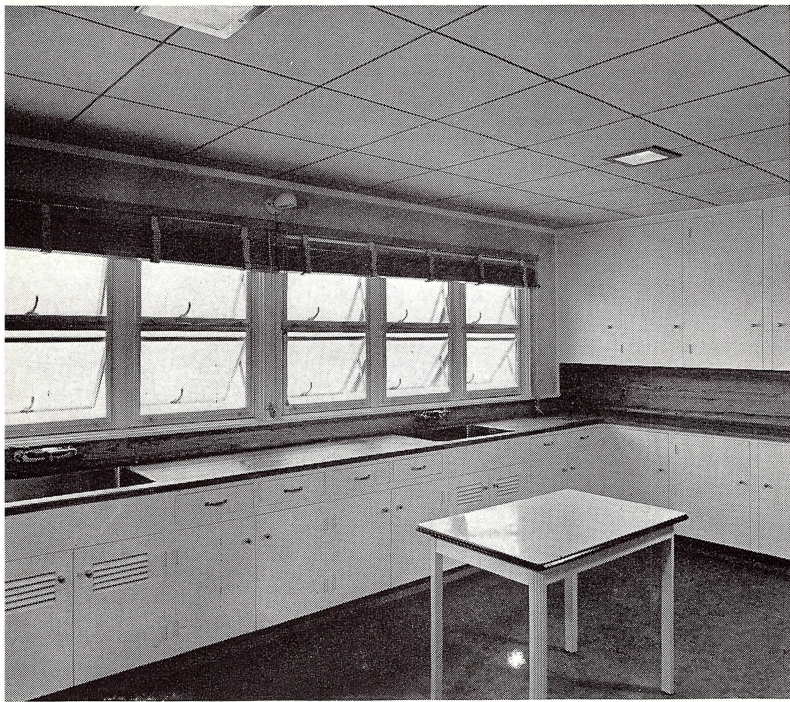
HARDWARE: Interior and exterior—stock, Russell & Erwin Mfg. Co.

PAINTING: Interior: Wood work—3 coats, semi-gloss, E. I. du Pont de Nemours & Co. Ceilings—pre-primed Celotex, The Celotex Corp. Floor—oil and wax. Exterior: Walls—2 coats white stain, Samuel Cabot, Inc. Sash—2 coats, E. I. du Pont de Nemours & Co.

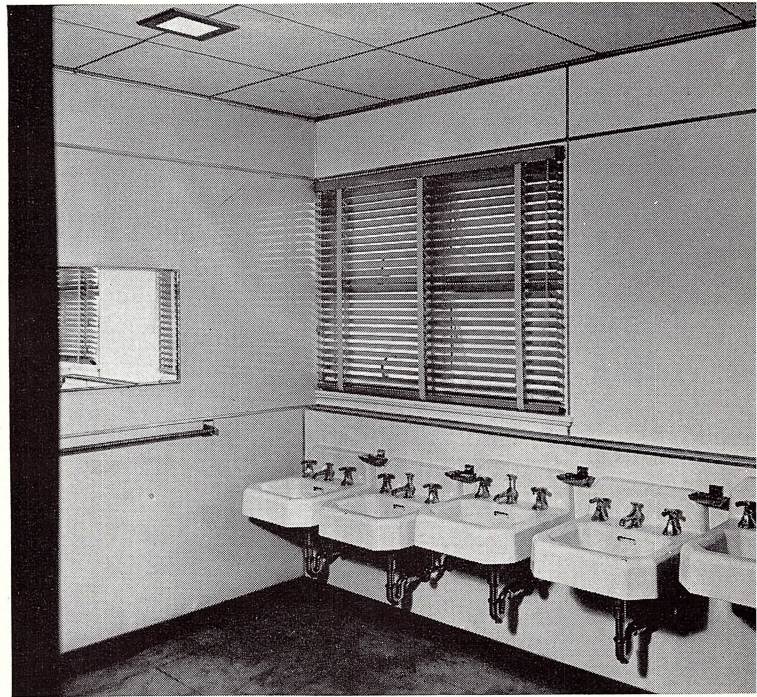
ELECTRICAL INSTALLATION: Wiring system and switches—Bryant Electric Co. Fixtures—Holophane Co.

PLUMBING: Fixtures—Standard Sanitary Mfg. Co. Fittings—Speakman Co.

HEATING: Warm air system. Boiler, oil burner and thermostat—General Electric Co.



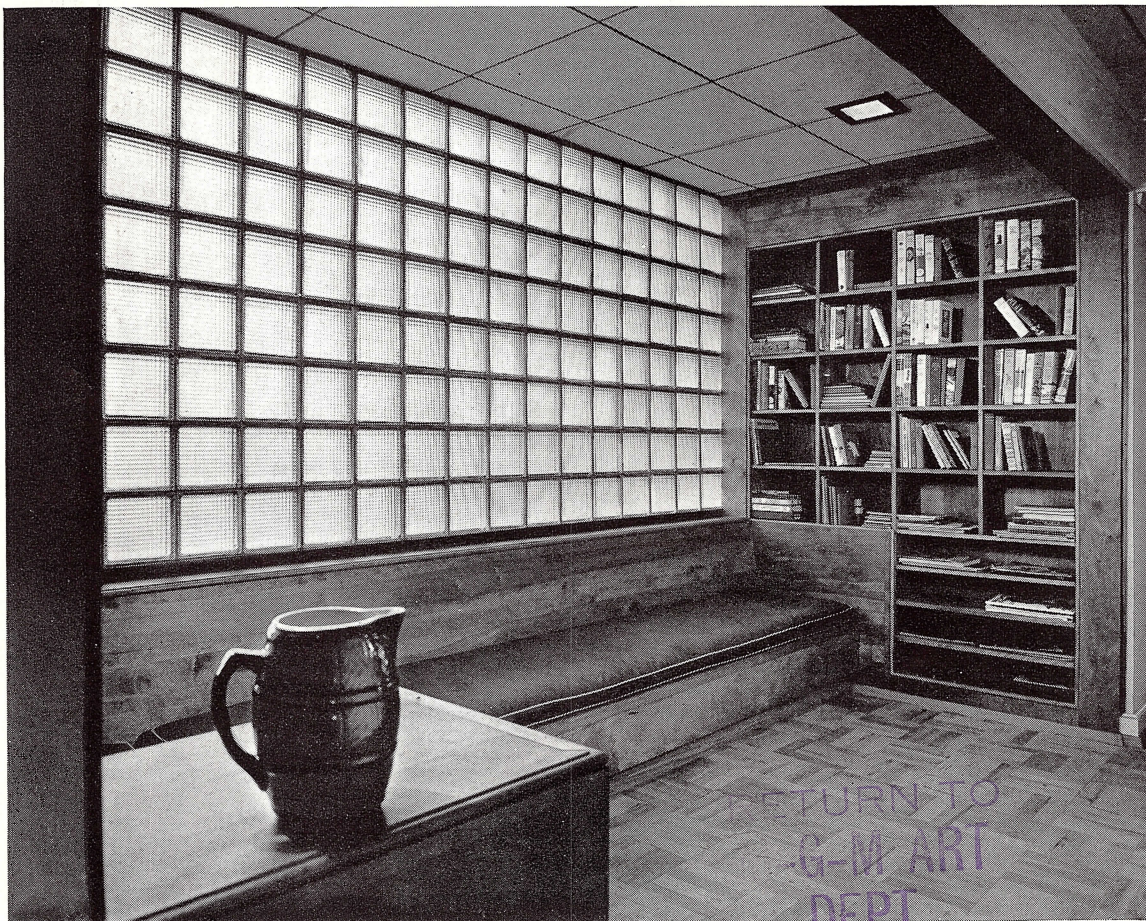
KITCHEN



WASHROOM

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M-G-M ART
DEPT.

LIBRARY

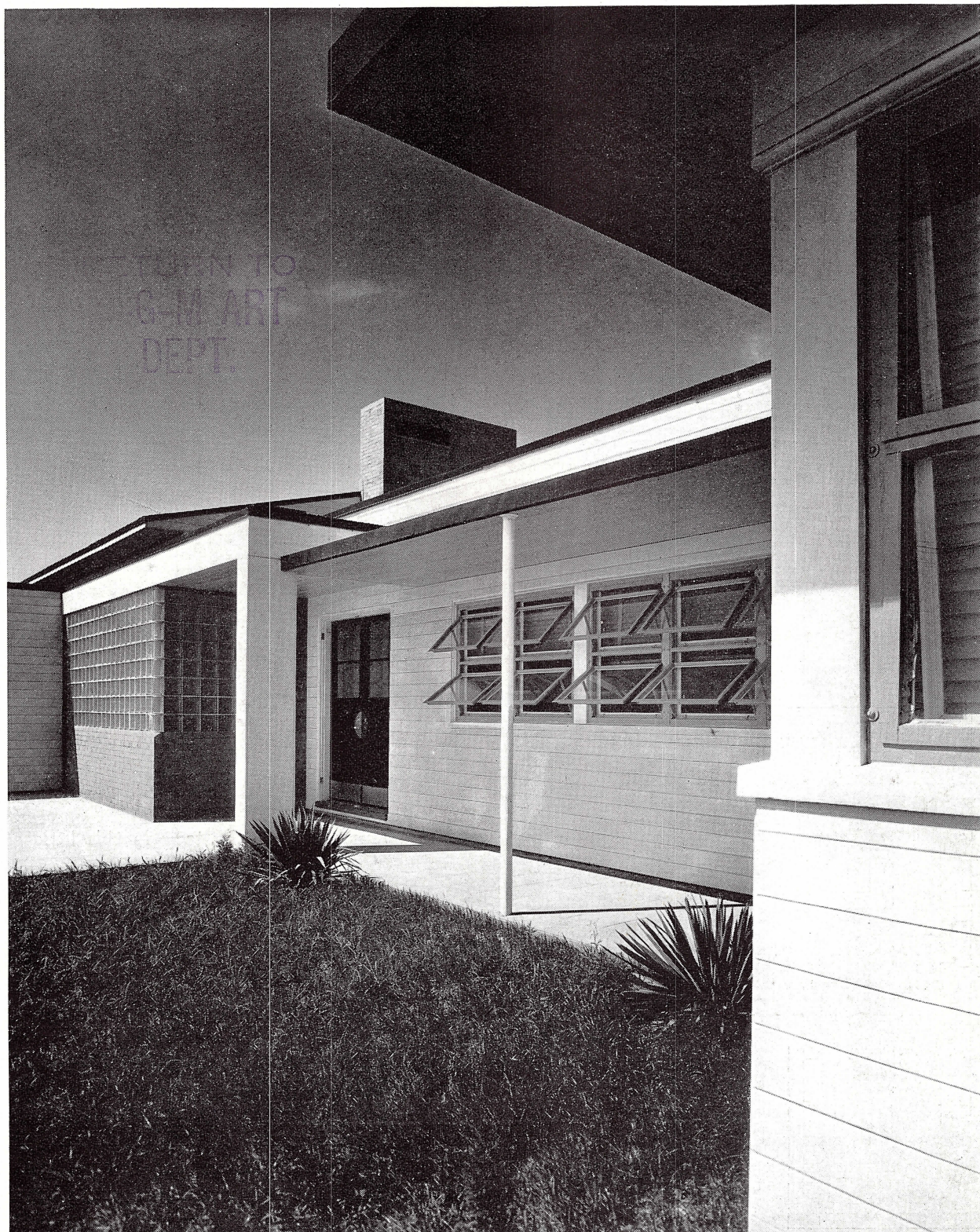


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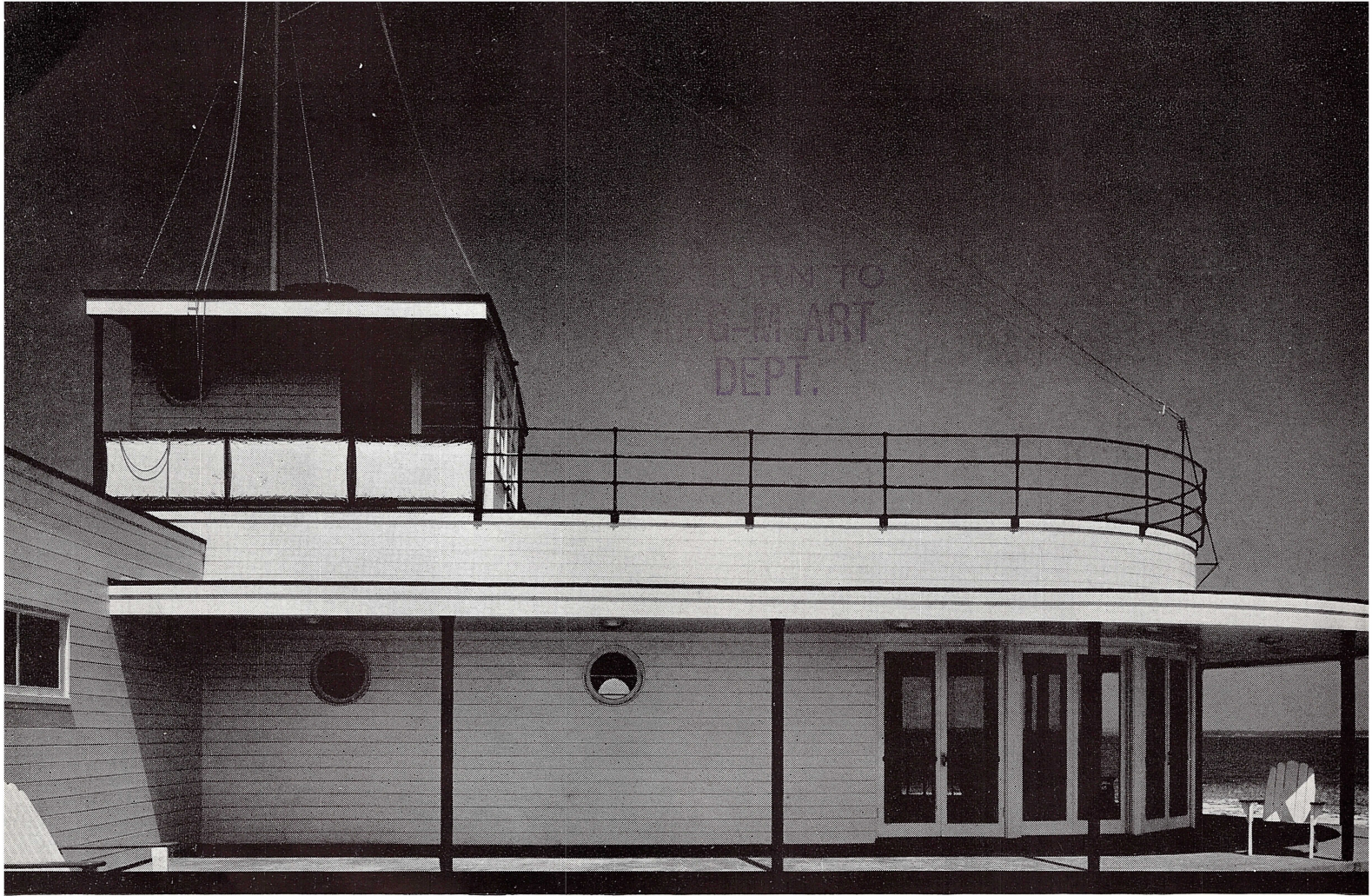
CHILDREN'S BEACH HOUSE, LEWES, DELAWARE

VICTORINE & SAMUEL HOMSEY, ARCHITECTS

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DEPT.



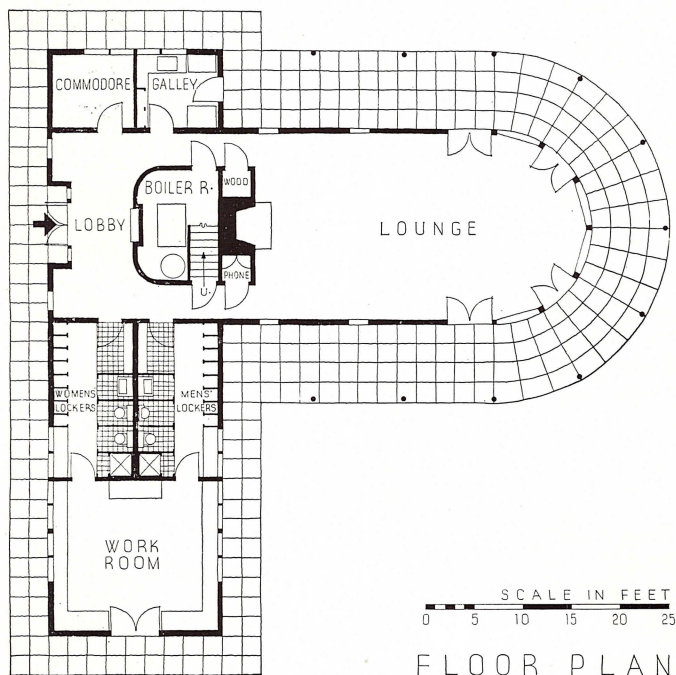
ENTRANCE



Robert M. Damora Photos

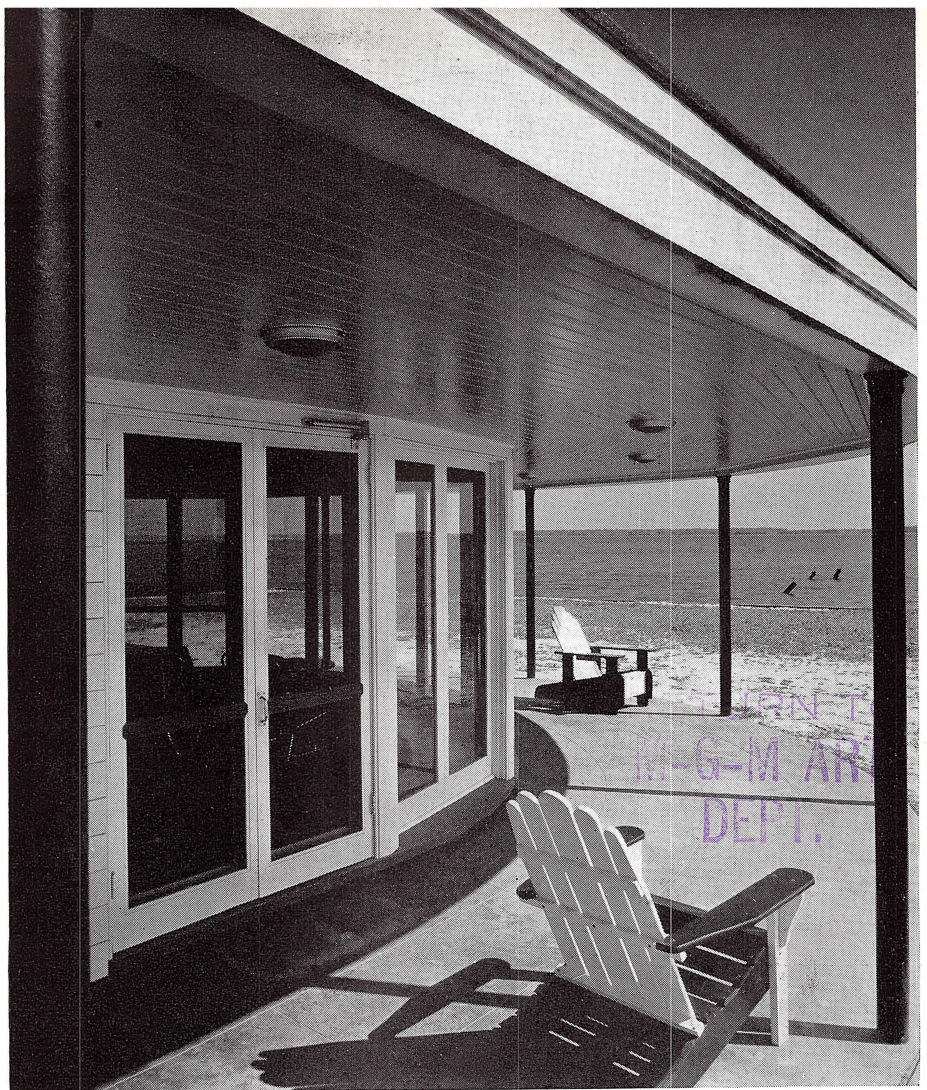
CAMBRIDGE YACHT CLUB, CAMBRIDGE, MARYLAND

VICTORINE & SAMUEL HOMSEY, ARCHITECTS



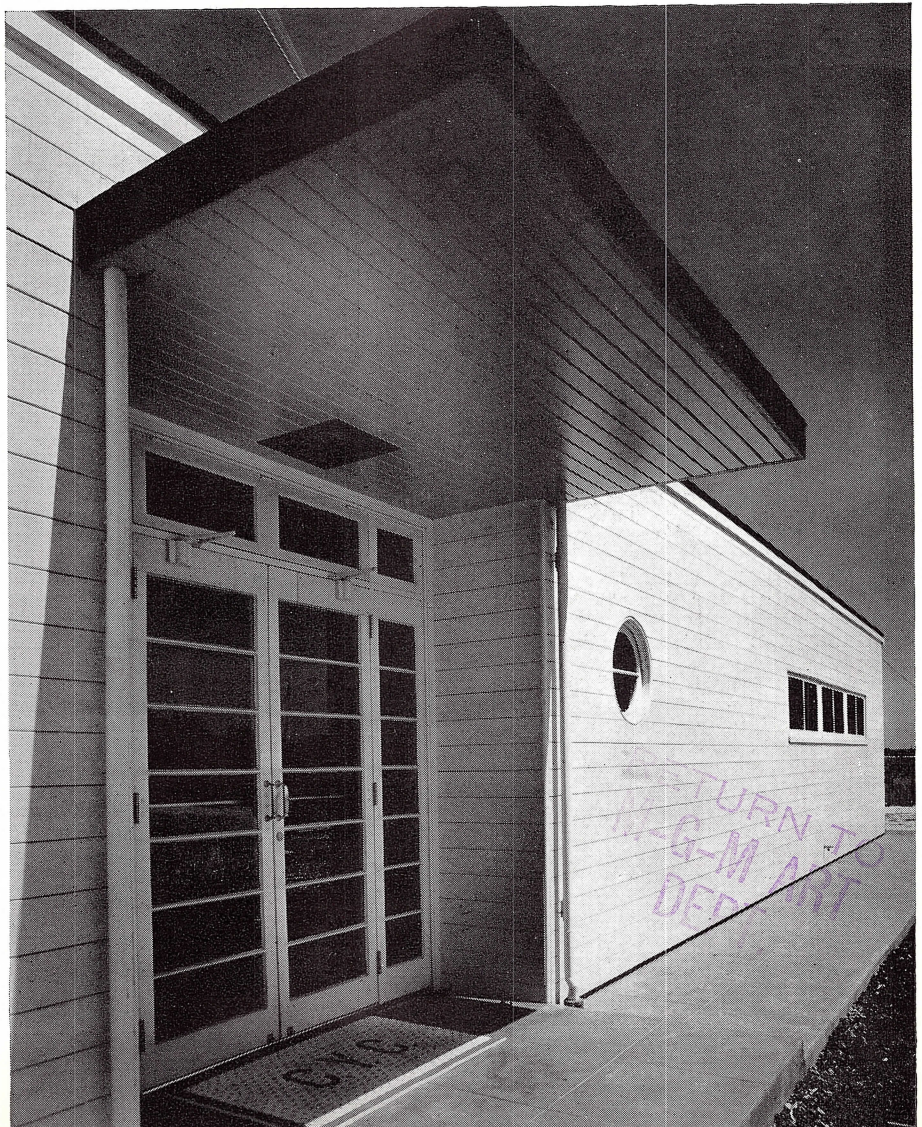
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DEPT.

THERE is a salty tang in this little club house, though the activities for which it was designed are not solely nautical. It offers opportunity for dancing in the lounge and on the upper deck, for loafing likewise, and a comfortable spot from which the races may be watched, with a bite to eat from the galley. Over the wing enclosing locker rooms and work room there is an answer to the need of every yacht club—storage for masts and spars. Inside as well as out, by night as well as day, resemblance to a ship afloat is architecturally maintained. Without sacrifice of utility, convenience or hospitality, it is evident that the club house was built on a strictly limited expenditure. The building is on made ground, and by reason of the difficulties in maintaining grass, a boardwalk extension of the terrace is to be built.

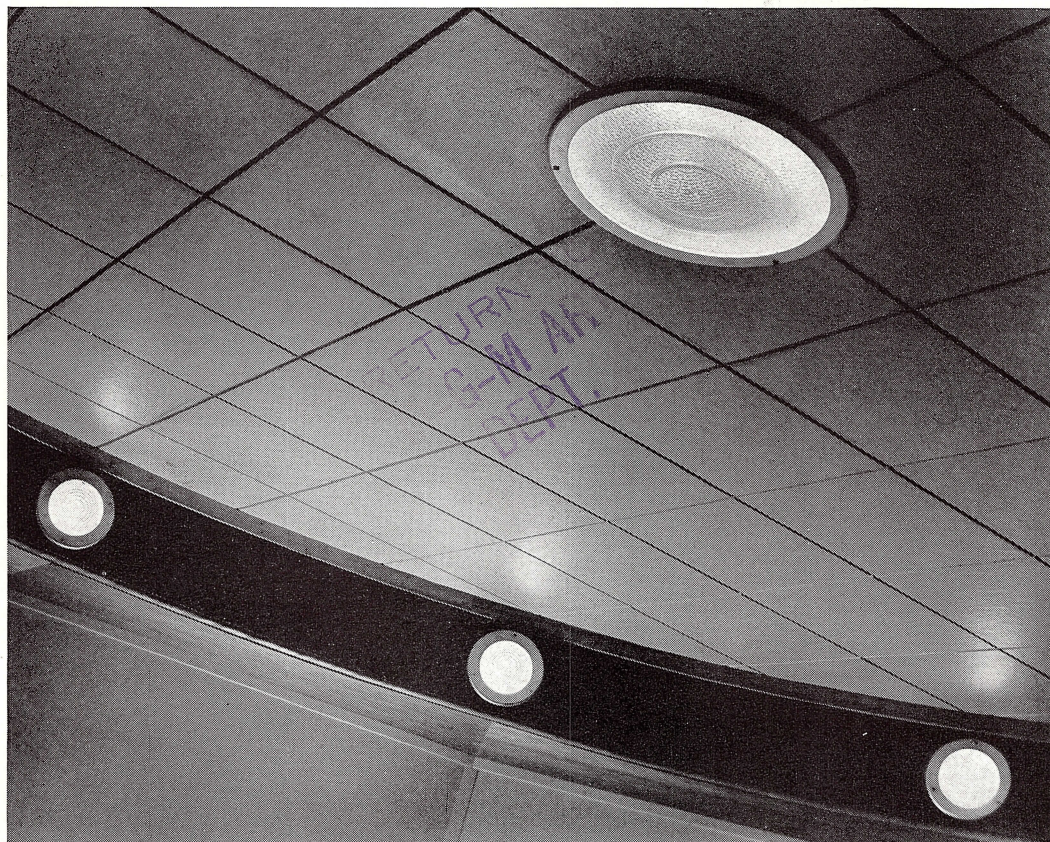


PORCH

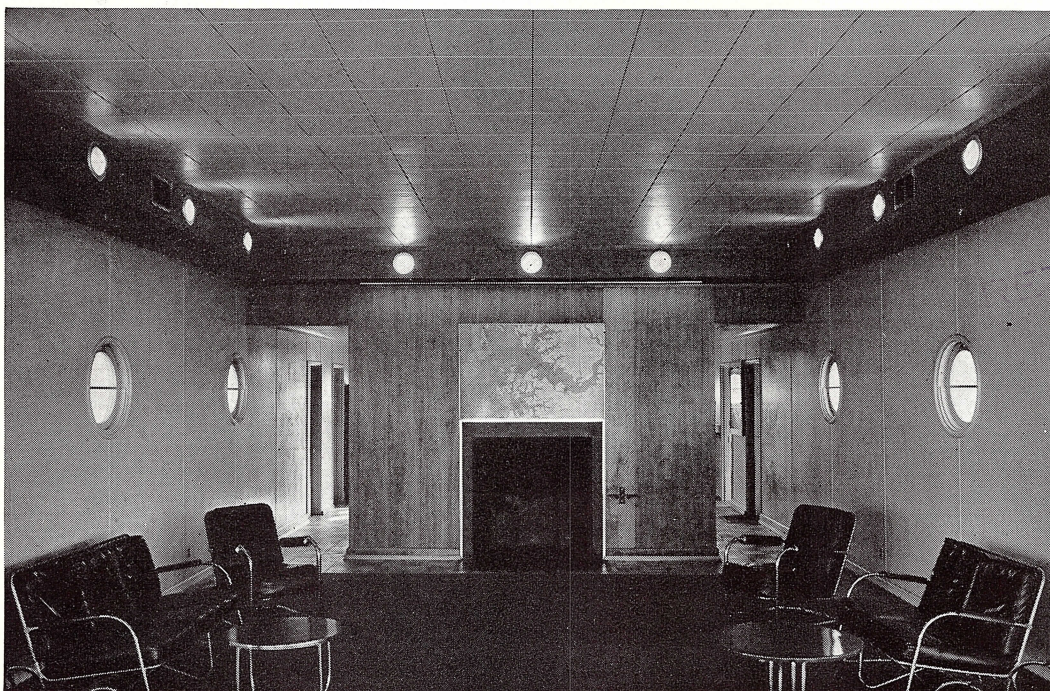
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DEPT.



ENTRANCE



CEILING
DETAIL



LOUNGE

CONSTRUCTION OUTLINE

FOUNDATIONS: Footings—continuous reinforced concrete.

STRUCTURE: Exterior walls—flush cypress siding, building paper, sheathing, 3 x 4 in. studs and ½ in. Homasote, Homasote Co. Interior partitions—2 x 4 in. studs with ½ in. Homasote on each side. Floor construction—4 in. reinforced concrete slab.

ROOF: 3 x 10 in. wood joists with canvas deck over lounge; Barrett Co. slag roof over front part.

SHEET METAL WORK: Flashing—lead coated copper, Revere Copper & Brass Co.

INSULATION: Walls—Homasote board, Homasote Co. Ceiling—1 in. Celotex, The Celotex Corp.

WINDOWS: Sash—wood, sliding. Glass—double strength, American Window Glass Co.

GENERAL CONTRACTOR:
CHARLES E. BROHAWN & BROS., CAMBRIDGE

FLOORS: E. L. Bruce Co. 9 x 9 in. mastic blocks of maple on concrete.

FLOOR COVERINGS: Galley—asphalt tile, Johns-Manville. Locker and work room—cement.

HARDWARE: Russell & Erwin Mfg. Co.

PAINTING: Interior: Walls and ceilings—3 coats paint, E. I. du Pont de Nemours & Co. Exterior:

Walls—2 coats, Samuel Cabot Co.

ELECTRICAL INSTALLATION: Wiring system—BX, Bryant Electric Co. Fixtures—Holophane Co.

PLUMBING: Fixtures—Standard Sanitary Mfg. Co. Water pipes—copper, Mueller Brass Co. Fittings—Speakman Co.

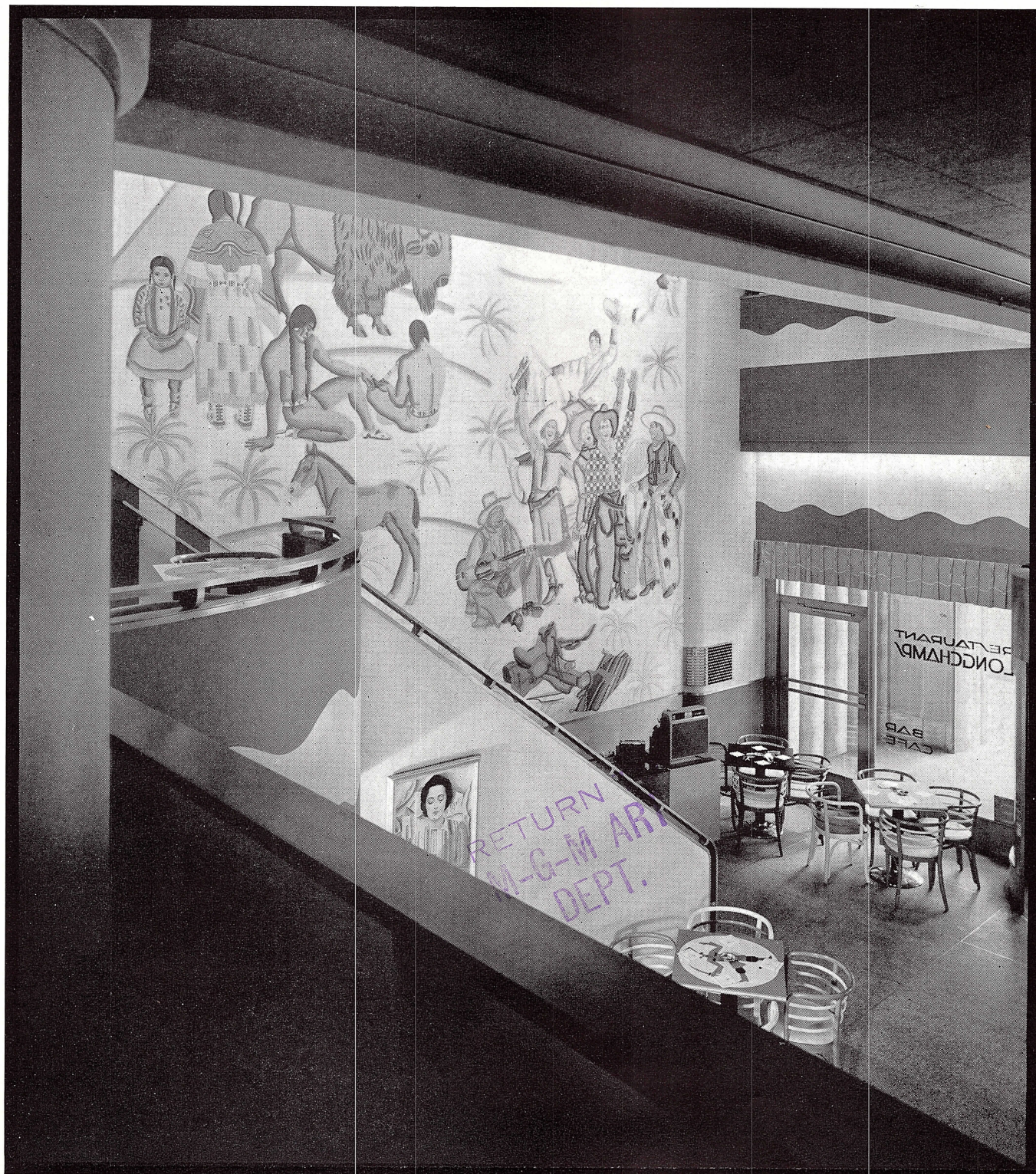
HEATING: Warm air system. Boiler, oil burner and thermostats—General Electric Co.

LONGCHAMPS RESTAURANT 253 BROADWAY, NEW YORK CITY

ELY JACQUES KAHN, ARCHITECT

WINOLD REISS AND ALBERT CHARLES SCHWEIZER, DESIGNERS AND DECORATORS

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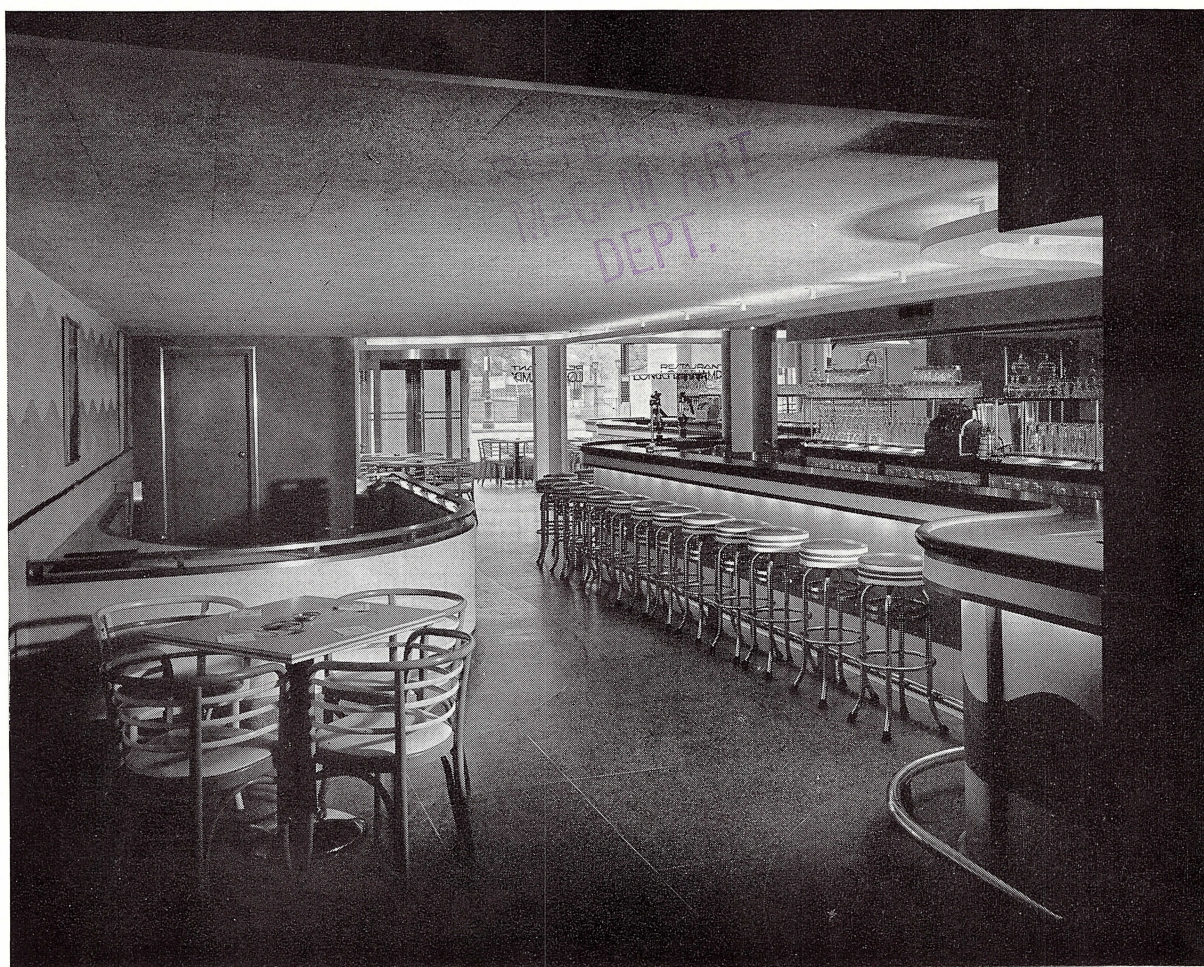


Ezra Stoller Photos

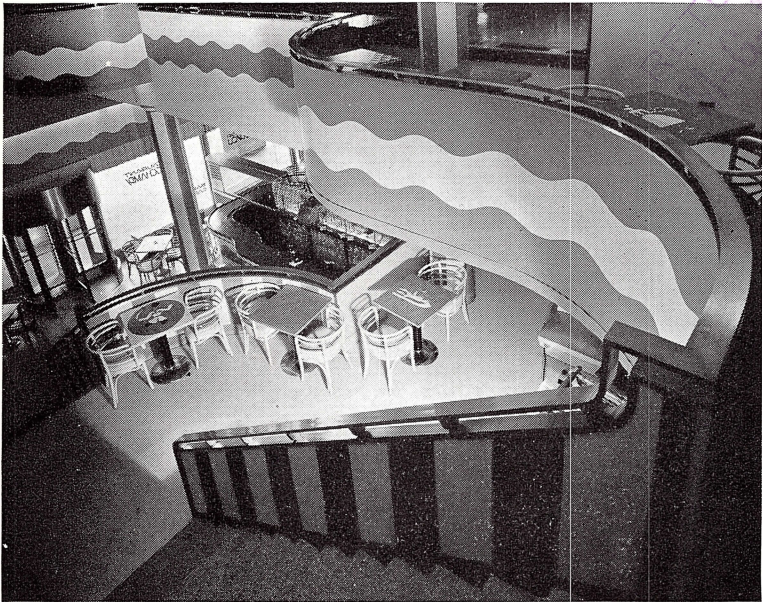
LONGCHAMPS RESTAURANT



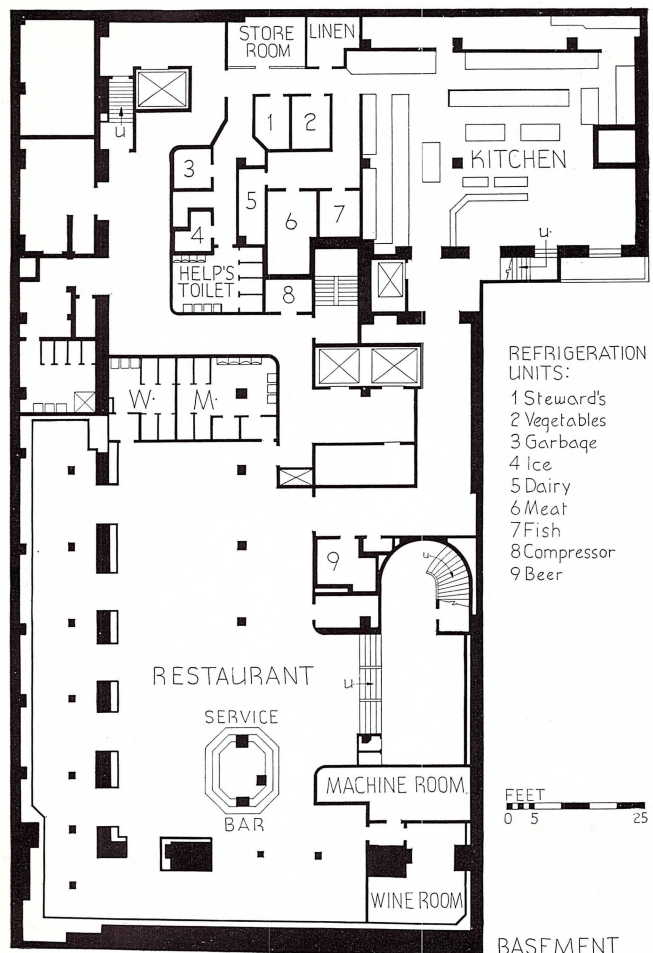
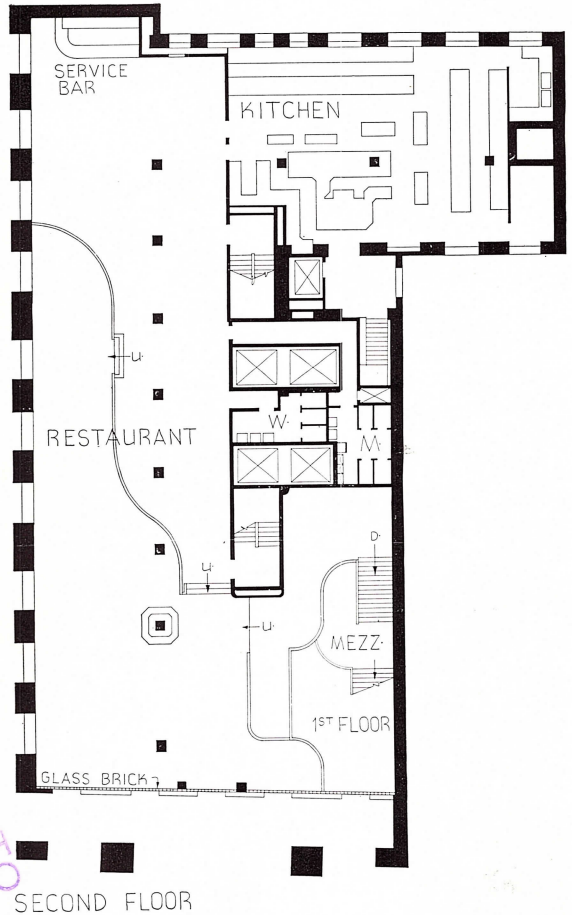
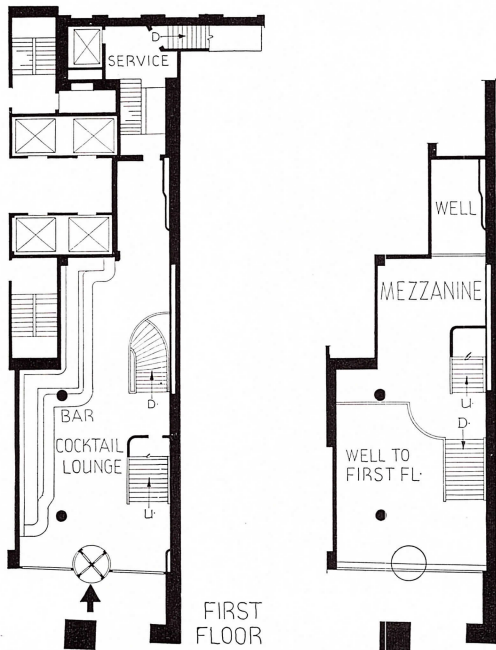
ENTRANCE



BAR
STREET FLOOR



ENTRANCE SEEN FROM MEZZANINE



- REFRIGERATION
UNITS:
- 1 Steward's
 - 2 Vegetables
 - 3 Garbage
 - 4 Ice
 - 5 Dairy
 - 6 Meat
 - 7 Fish
 - 8 Compressor
 - 9 Beer

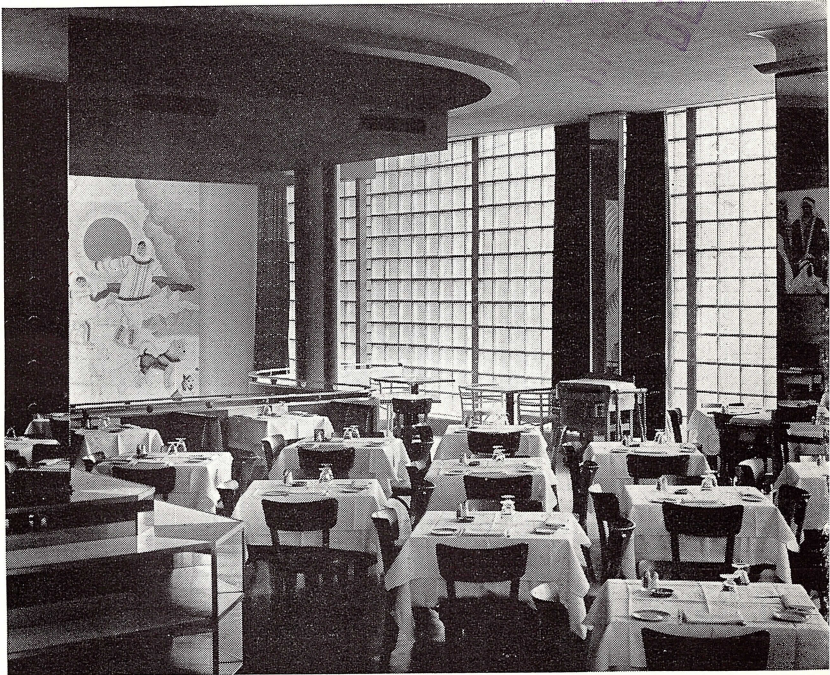
A MAJOR difficulty with restaurateurs lies in persuading the patrons to go upstairs or down, for street level space is expensive. There was just enough of it here to allow generously for entrance and bar, though the whole basement and the whole second floor were also available. The persuasion is effected architecturally through progress up or down by easy and inviting stages—the interpolation of a small mezzanine with tables and the use of wide stair wells, with broad glimpses of what lies beckoning just beyond. Spreading the restaurant into these widely separated serving levels necessitated two kitchens. Air conditioning requirements were formidable. Service doors are automatically operated through the use of the electric eye. As in other restaurants of this organization, dependence for appeal rests heavily upon Winold Reiss' murals, sumptuous appointments, and a skillful handling of light.

LONGCHAMPS RESTAURANT



RESTAURANT SECOND FLOOR

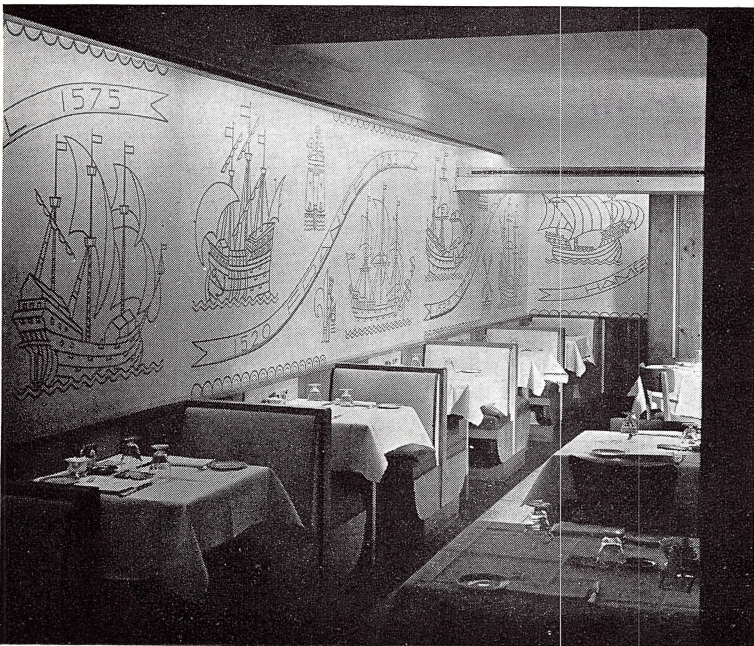
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ELY JACQUES KAHN, ARCHITECT

WINOLD REISS AND ALBERT CHARLES SCHWEIZER, DESIGNERS AND DECORATORS

RESTAURANT BASEMENT



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CONSTRUCTION OUTLINE

STRUCTURE: Terra cotta and gypsum block.
SHEET METAL WORK: Ducts for air conditioning system—galvanized iron and copper, Bethlehem Steel Co. and Youngstown Sheet & Tube Co.

SOUND INSULATION: Bar, cocktail lounge, restaurant and dining room ceilings—Acoustex, acoustical correction tile, Johns-Manville.
WINDOWS: Sash—Lupton rolled steel casements, Michael Flynn Mfg. Co. Glass— $\frac{1}{4}$ in. plate, Pittsburgh Plate Glass Co.

STAIRS: Steel construction with terrazzo treads in public sections; cement treads in service sections.

FLOORS: Raised portion of second floor dining room—steel framing with U. S. Gypsum Co. Gyplank slab.

FLOOR COVERINGS: Rubber flooring, $\frac{1}{4}$ in., Armstrong Cork Co.

WALL COVERINGS: Linoleum, $\frac{1}{8}$ in.; knotty pine paneling in basement restaurant; Macawood Flexwood wainscot in second floor dining room, U. S. Plywood Corp.

WOODWORK: Door frames and trim—steel. Railings and interior metal work—Rich-Low brass, Leon J. Arnold. Interior doors—hollow steel, Triangle Door Co. Exterior doors—nickel-silver, Leon J. Arnold. Special doors—Allen automatic disappearing store front with Van Kannel revolving door, nickel silver and plate glass.

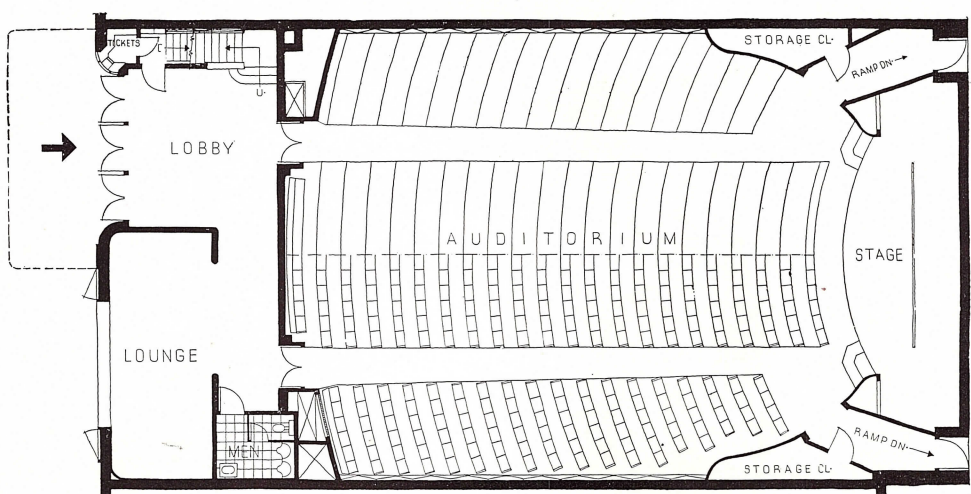
HARDWARE: Interior and exterior—nickel silver, Norwalk Lock Co. Service doors to kitchen—Magic Eye, Stanley Works.

ELECTRICAL INSTALLATION: Complete system with indirect lighting reflectors, Eastern States Electric Corp. Fixtures—Kantack Co. and Mitchell Vance Co. Loudspeaker system—Magnaphone Co.

PLUMBING: Fixtures—Kohler Co. Water pipes—brass, Foster-Wheeler Co.; waste and vent pipes—Cast and wrought iron.

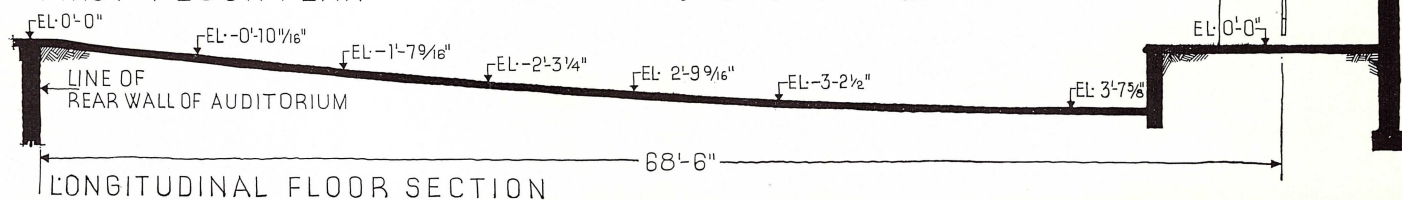
HEATING AND AIR CONDITIONING: Complete supply and exhaust ventilation; fans and blowers—Clarage Fan Co. Complete air conditioning system—Carbondale compressors, Worthington Pump & Machinery Co. Clarage Fan Co. filters and Freon cooling, Kimetic Chemicals, Inc. System installed by Raisler Heating Co.

MODEL THEATER, SOUTH HAVEN, MICHIGAN

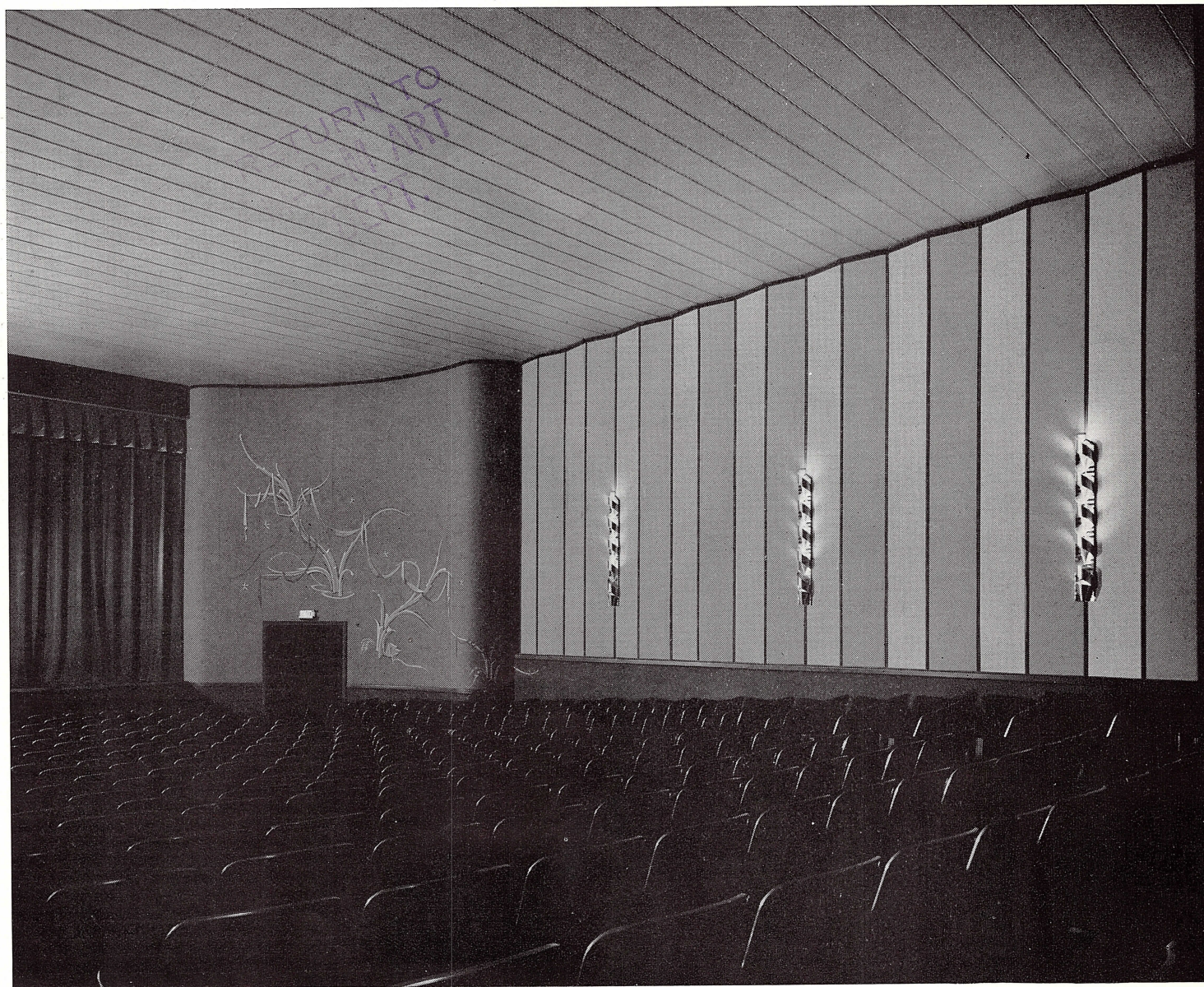
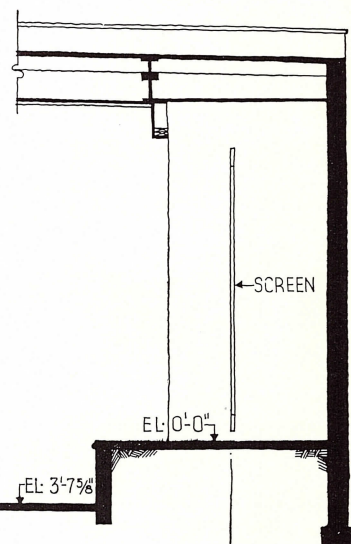


FIRST FLOOR PLAN

SCALE IN FEET
0 5 10 15 20 25



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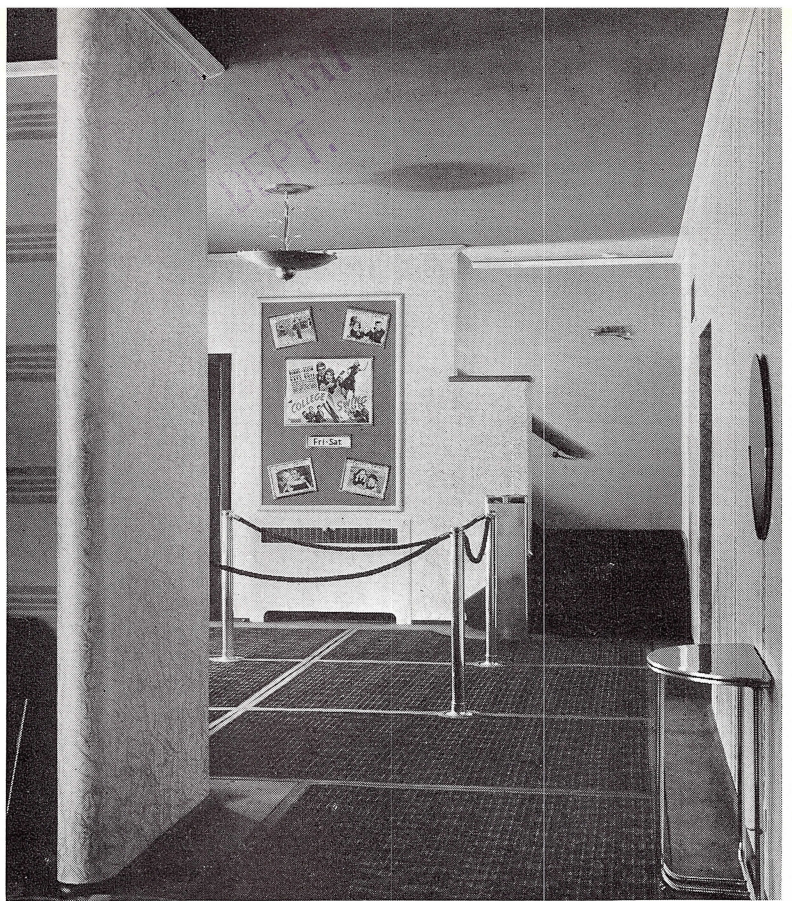


Hedrich-Blessing Photo.

W. L. PEREIRA, ARCHITECT

PEREIRA & PEREIRA, THEATER CONSULTANTS

BURDENED by unusual costs of original investment, maintenance, and operation, this theater had to be simple and direct without luxuries, yet appealing to a sophisticated summer clientele. Its owner has another theater of larger seating capacity in the town, the population of which expands from 5,000 in the winter to 15,000 in the summer. Thus the theater has to pay its way on the basis of three months' income per annum. Its operating equipment included cooling and also heating—in the possibility of year-round operation—an equipment representing approximately 37 per cent of the total cost. Foyer and lounge are large for the capacity of 460 seats, but shows do not run continuously, thus a meeting place for patrons is desirable. It will be noted that this lounge, in plan and structure, is easily convertible into a store.



CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—brick masonry. Front wall—faced with machine terra cotta, Northwestern Terra Cotta Co. Interior partitions—concrete block, plastered. Structural steel—steel roof beams; Junior beams for 2nd floor framing, Jones & Laughlin Steel Corp.

ROOF: Wood joists, 3-ply composition, Johns-Manville.

SHEET METAL WORK: Flashing, gutters and ducts—galvanized iron, American Rolling Mill Co.

SOUND INSULATION: Auditorium walls and ceilings—Nu-wood, Wood Conversion Co.

WINDOWS: Sash—steel, Detroit Steel Products Co. Glass— $\frac{1}{4}$ in. polished plate, Glass blocks—Pittsburgh-Corning Corp.

FLOOR COVERINGS: Lounge and aisles—carpet, Crestwood, Alexander Smith. Lobby—link mats, Goodyear Tire & Rubber Co.

WALL COVERINGS: Foyer and lobby—Fabrikoid, E. I. du Pont de Nemours & Co.

HARDWARE: Interior and exterior: Push and pull bars—Payson Mfg. Co. Door closers—Norton Door Closer Co. Locks—Reading Hardware Co. Butts—Lawrence Bros. Panic Hardware—Vonnegut Hardware Co.

ELECTRICAL INSTALLATION: Wiring system—thin wall conduit, Buckeye, Youngstown Sheet & Tube Co. Switches—Graybar Electric Co. Fixtures—special, Solar Light Co.

PLUMBING: Fixtures—Kohler Co. Waste and water pipes—galvanized iron. Sump pump—Chicago Pump Co.

HEATING AND AIR CONDITIONING: Heating—low pressure steam, two pipe. Blast coils and registers—Trane Co. Cooling—direct expansion, Westinghouse Electric & Mfg. Co. Fans—Clarage Fan Co. Automatic coal stoker—Iron Fireman Mfg. Co. Radiators—convector type, Trane Co. Valves—Crane Co. Automatic temperature and damper control, Barber-Colman.

SPECIAL EQUIPMENT: Venetian blinds—Western Venetian Blind Co. Seats—American Seating Co. Projection—International Projector Co. Sound—Western Electric Co.

WGY BROADCASTING STATION, SCHENECTADY, N. Y.

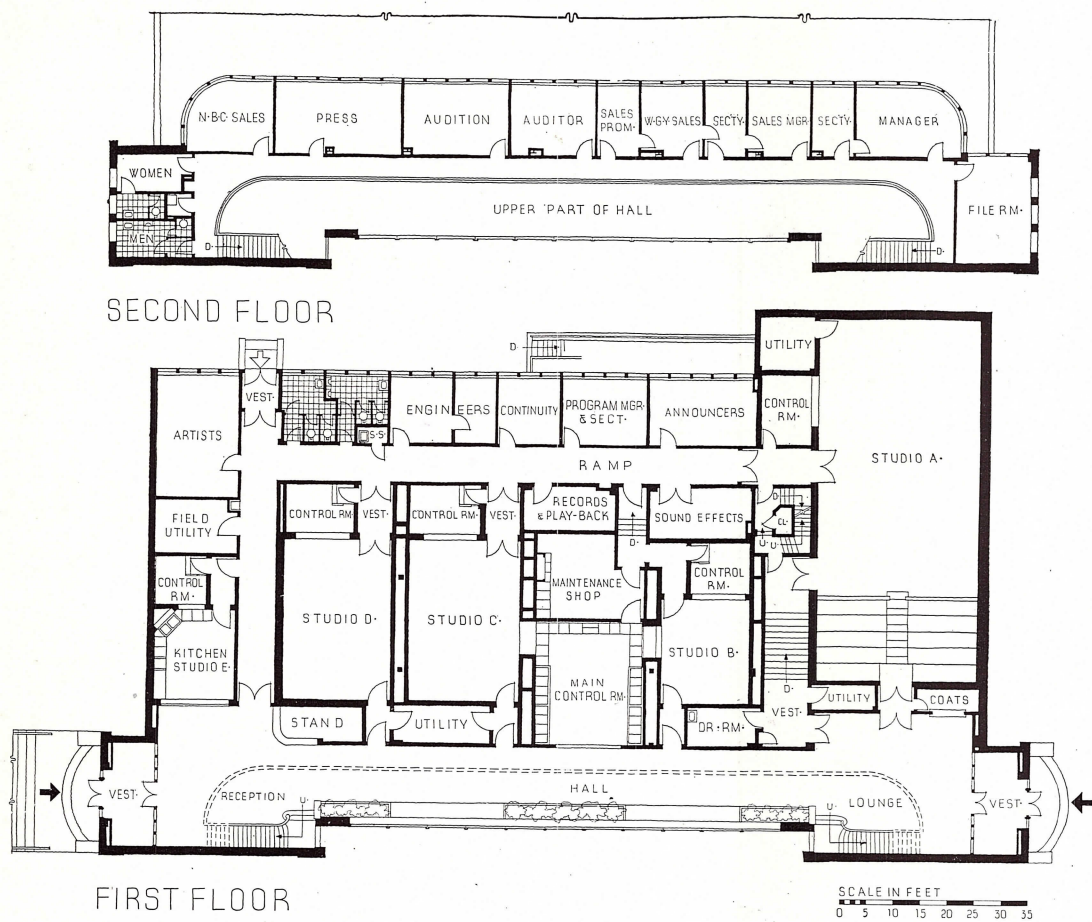


ENTRANCE

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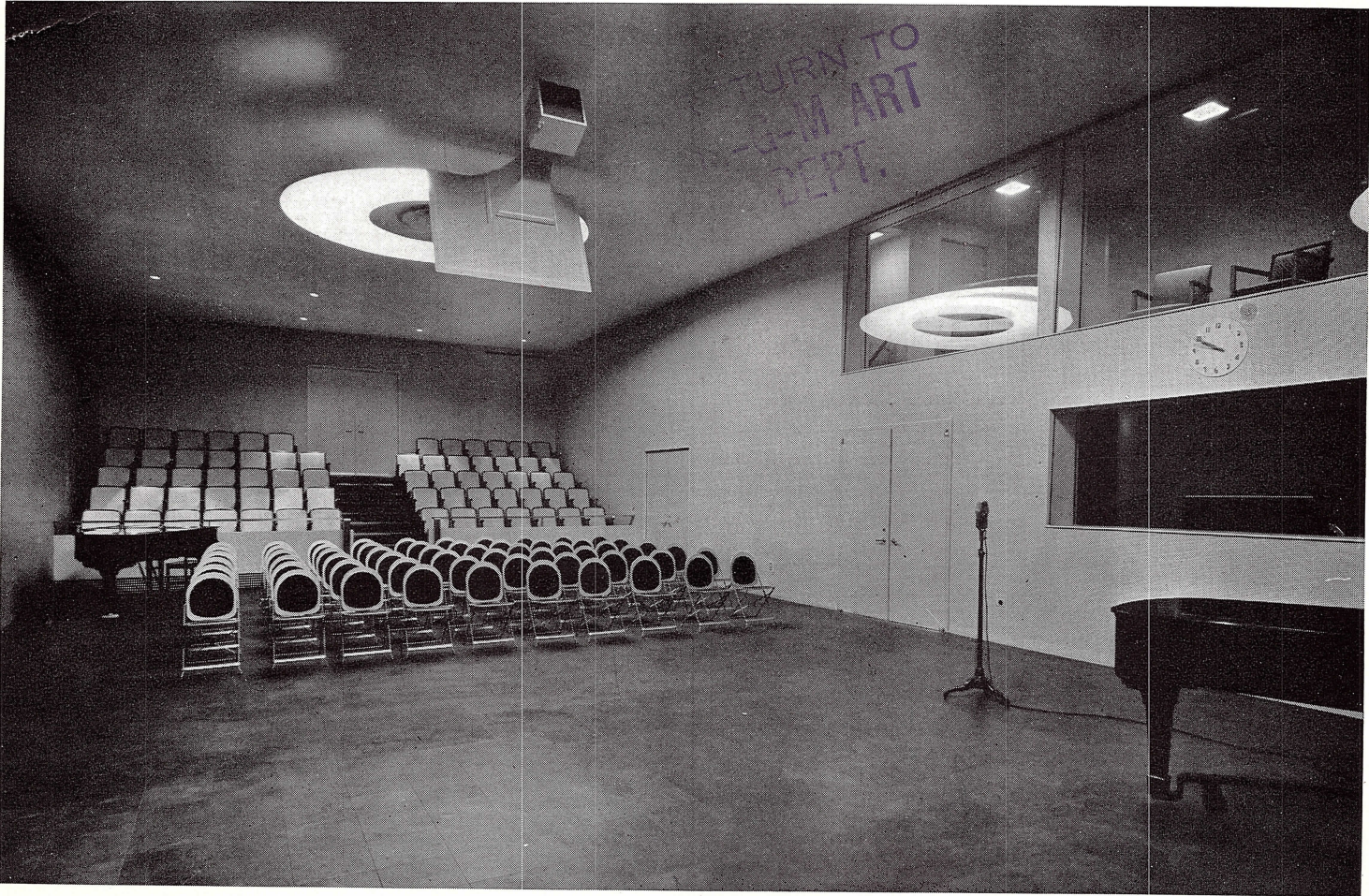
BUILT and owned by General Electric, this new broadcasting station is leased to and operated by National Broadcasting Co. Standing on a rectangular plot on the main east-west highway through Schenectady, the combination of red brick, glass block with chromium surrounds puts a trim foot forward in G. E.'s rather drab factory group.

In the plan, the main control is the heart of the structure, surrounded by its five studios, each structurally hung for sound insulation. Traffic separation is noteworthy, with the public flowing through the broad front hall, the employes and artists entering all studios from the rear corridor. There are, of course, no windows in any of these studios, artificial light being controlled at will, and the ventilation provided by a modern air conditioning plant. One of the studios, it will be noted, is equipped as a modern kitchen for broadcasting programs of particular interest to housewives.



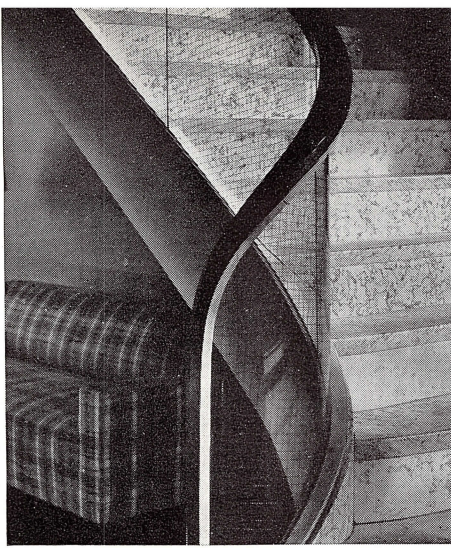
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DEPT.

STUDIO A



WGY BROADCASTING STATION

HARRISON & FOUILHOUX,
ARCHITECTS



RECEPTION



RETURN TO
M-G-M ART
DEPT.

CONSTRUCTION OUTLINE

FOUNDATIONS: Footings and walls—concrete. Waterproofing—integral for floors and walls below grade.

STRUCTURE: Exterior walls—face brick; common brick back up, Belden Stark. Interior partitions—cinder block, Domini Builders Supply Co., Schenectady Cast Stone Co. Structural steel—welded, Bethlehem Steel, U. S. Steel. Floor construction—concrete slab on earth for part of 1st; concrete slab and steel beams for 2nd.

ROOF: Gyp-steel plank and built-up roofing, Structural Gypsum Div., American Cyanamid & Chemical Corp.

SHEET METAL WORK: Flashing and gutters—copper, Anaconda, American Brass Co. **INSULATION:** Walls and roof—4 in. rock wool, Johns-Manville.

WINDOWS: Sash—steel, double hung, Crittall-Federal, Inc. Glass— $\frac{1}{4}$ in. and $\frac{1}{8}$ in. sheet, Pittsburgh Plate Glass Co. Glass blocks—Owens-Illinois Glass Co.

STAIRS: Stairs—steel pan construction; marble treads and risers, Vermont Marble Co.

FLOOR COVERINGS: Corridors—asphalt tile. Kitchen studios—linoleum. Speaker's studio and client's room—carpet. Toilets—ceramic tile.

WALL COVERINGS: Studios—perforated transite, Johns-Manville. Studio "B"—Macassar ebony Flexwood, U. S. Plywood Corp.

DOORS: Interior—wood. Exterior—bronze and glass. Soundproof doors and stops in studios—Hardwood Products Co.

HARDWARE: Interior and exterior—bronze, P. & F. Corbin.

FURNITURE: By Arundell Clarke, Ltd.

PAINTING: Interior: Walls, trim and sash—lead and oil. Ceilings—casein.

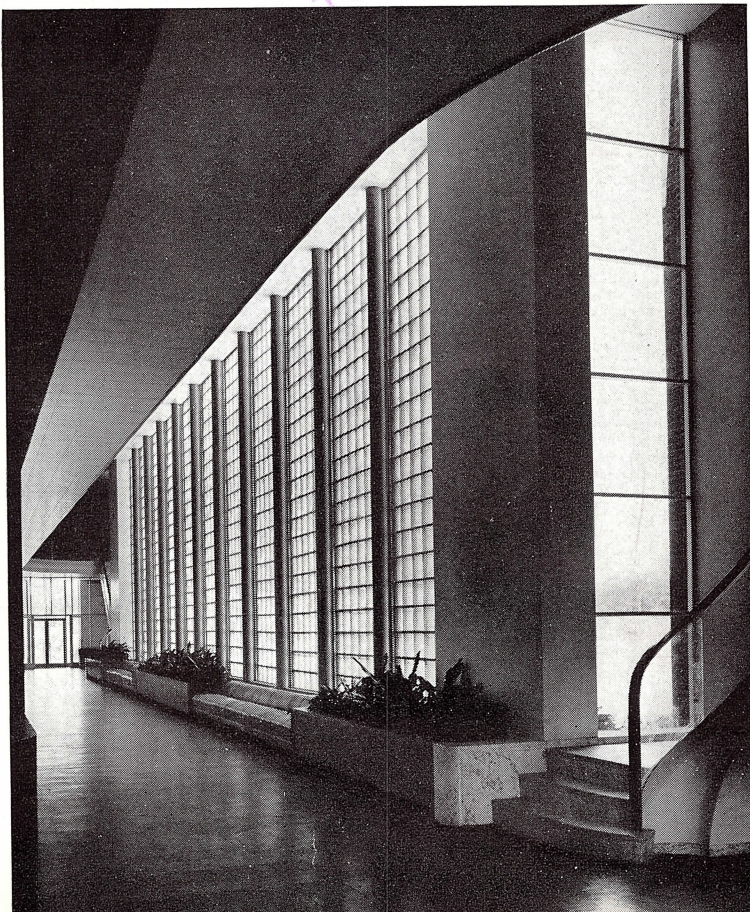
ELECTRICAL INSTALLATION: Complete equipment—General Electric Co.

PLUMBING: Fixtures by Eljer Mfg. Co.

HEATING AND AIR CONDITIONING: Owner's existing steam supply. Air Conditioning—General Electric. Radiators—cast iron, American Radiator Co.

GENERAL CONTRACTOR: A. L. Hartridge.

HALL



SMALL HOUSE COMPETITION

sponsored by
LADIES HOME JOURNAL

In the enthusiastic opinion of the jury, this competition was noteworthy for the high quality of the submissions and for the variety of the solutions which were presented. Of the seven hundred entries, hardly half a dozen could be classed as banal or inept. The great majority were emphatic testimony of the imagination and ingenuity with which architects are approaching the subject: and we certainly have here a challenge to the architect who complains, "What can you do with a small house?"

Several characteristics of the entries taken as a group were especially noteworthy:

1. The house was conceived as a functional entity, with emphasis upon workability, convenience and comfort. In most cases the elevations were logically and simply developed from the plans. There was a marked absence of straining for architectural effect or the torturing of plan to produce such effect. As a result even those entries which utilized traditional forms exhibited a freshness which gave them distinctly a modern feeling.

2. Only a small percentage of the entries essayed a one-story solution. The verdict of the jury was thus in harmony with the majority of the contestants that two stories provided greater convenience and economy with far more satisfactory utility of a small plot of land.

3. The great majority of the contestants developed the "back-yard" as an outdoor living area aptly related to the interior living space. This strongly marked trend may be taken to heart by developers, who still generally cling to the notion that the homeowner prefers the diversion of the street to the privacy and repose of his own garden. Similarly, writers of municipal ordinances may take a lesson from the general placing of the garage prominently to the fore, a feature essential for them to permit

if the full livability of house and lot are to be realized.

4. In most entries a combination of living and dining areas to provide a sense of spaciousness and to permit flexibility of use was a feature. Ten entries essayed an entirely separate dining room, and in these cases the most outstanding were apparently considering the space from the point of view of other utility than dining solely.

5. If dining space as a separate element was subdued, the basement was to a wide extent eliminated. Great ingenuity was shown in developing on the first floor compact but thoroughly workable arrangements for heating, laundering and storage—those functions commonly relegated to the basement—usually with a marked contribution to the convenience of housekeeping.

6. Although the trend in design was perhaps less distinctly modern than in some recent competitions, that trend is emphatic none the less. The jury suspected that references in the program to FHA acceptability may have added to the caution displayed in facing the issue of design and expressed the hope that the influence of government in the housing field would not act to prejudice the development of new forms and new treatments of form.

The opinion was frequently expressed by the jury that the nature of the program in no small part contributed to the success of the competition. While clearly stating the fundamental consideration of the problem, it avoided the frequent fault of too closely restricting competitors in matters of detail, and allowed free play to the designer in developing his concept of comfortable living within the basic limitations.

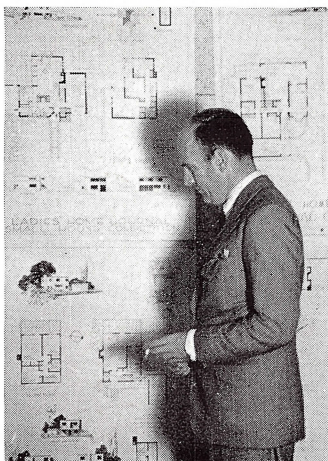
MILES L. COLEAN
CHAIRMAN

THE JURY: MILES L. COLEAN, *Chairman*; AYMAR EMBURY, II; WALLACE K. HARRISON; GRACE MORIN; WILLIAM WILSON WURSTER

RETURN TO
M-G-M ART
DEPT.



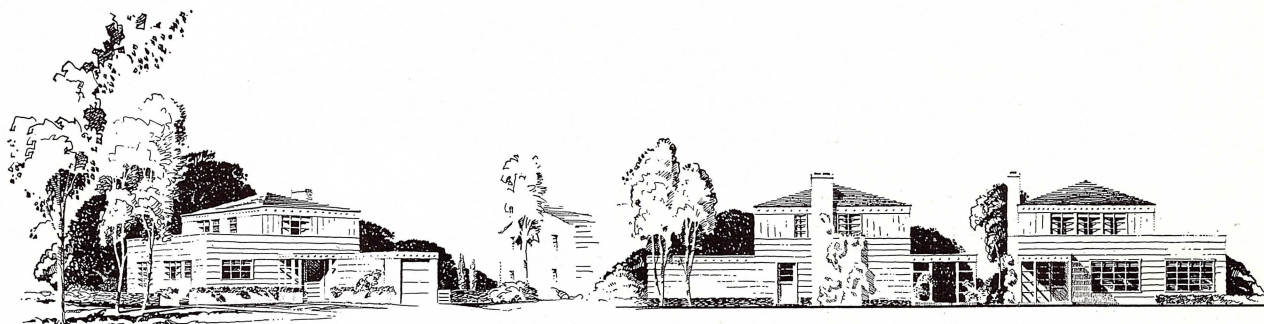
Jury chairman Colean, left, awaits the findings of Aymar Embury II and Grace Morin on whether or not a prospective housewife can, while in the kitchen, keep an eye on the children outdoors.



Wallace K. Harrison turns from trylon and perisphere to a house for World's Fair visitors.



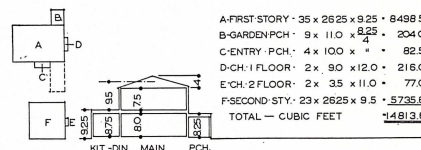
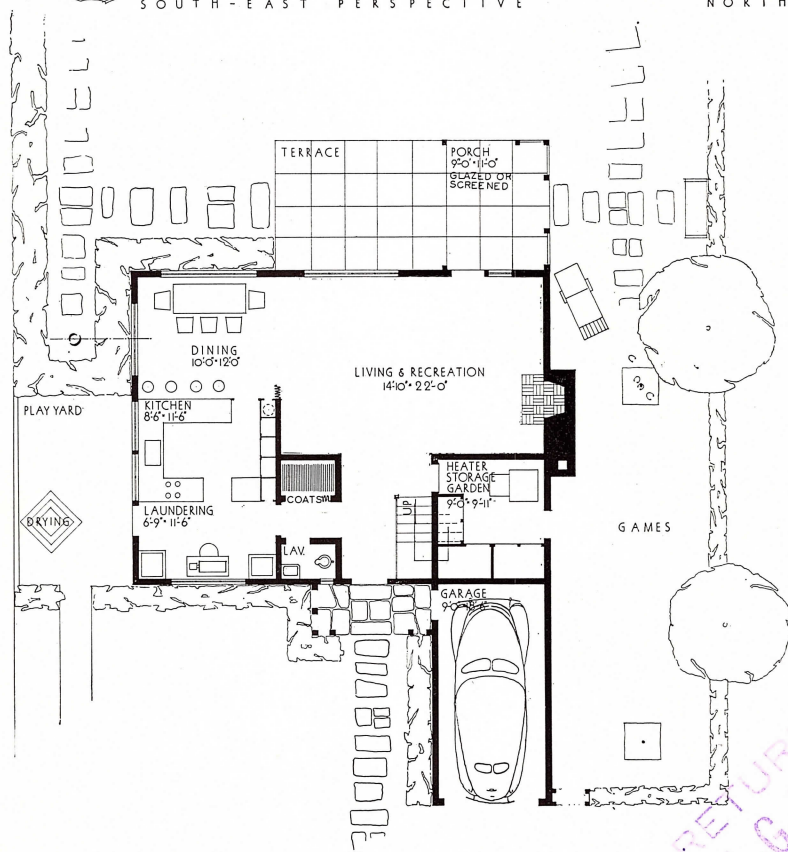
William Wilson Wurster tells competition adviser John Cushman Fistere about California's houses.



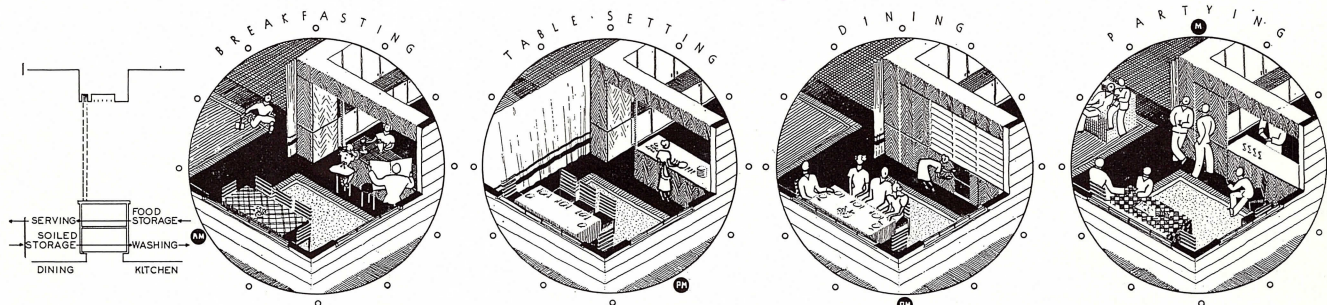
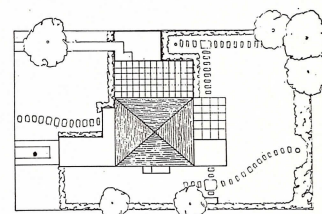
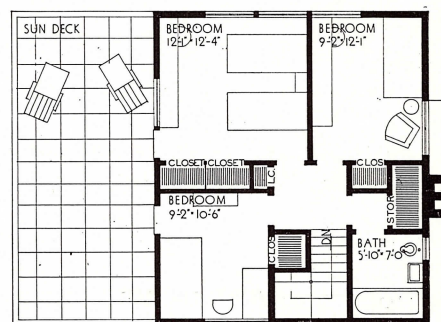
SOUTH-EAST PERSPECTIVE

NORTH ELEVATION

WEST ELEVATION



CUBAGE CALCULATIONS

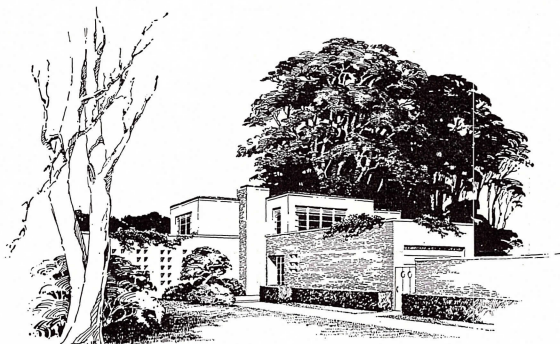


ILLUSTRATING THE VERSATILE KITCHEN AND DINING SPACE, THE ACTIVITY NUCLEI OF ANY SMALL HOUSE

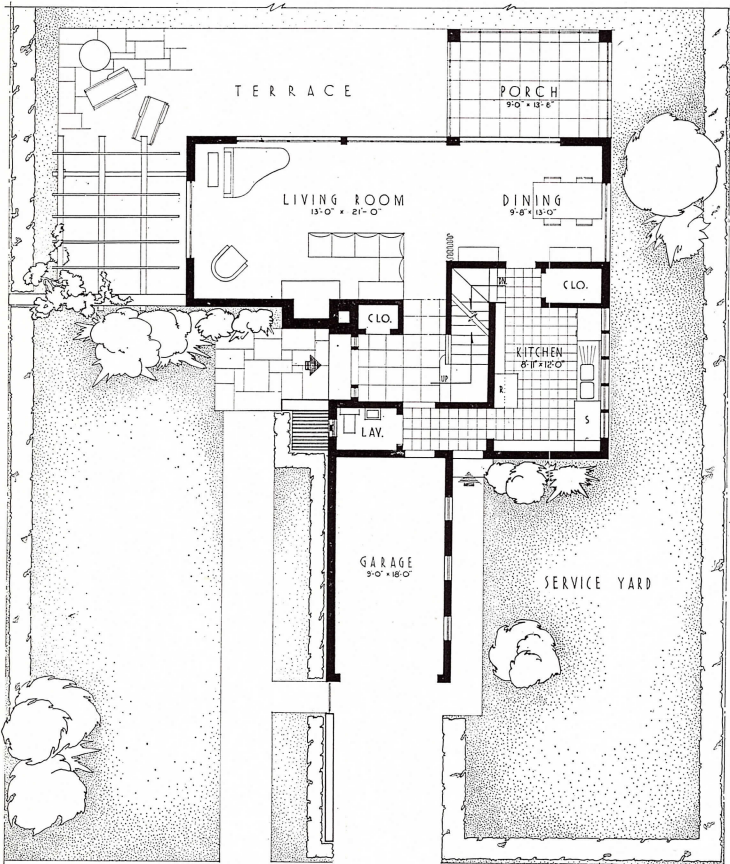
The most nearly perfect answer to the program's requirements, stated and implied. An economical form housed in an economical plan, distinguished for the ingenious kitchen-dining area arrangement, ample closet areas, supervised play area, protected porch and outdoor terrace. The design is simple, pleasing, and unstyled.

SCALE FLOOR PLANS
 1/16" EQUALS ONE FOOT

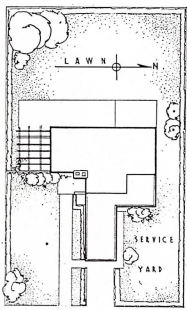
\$1000 PRIZE: M. RIGHTON SWICEGOOD, NEW YORK CITY



P E R S P E C T I V E F R O M S T R E E T



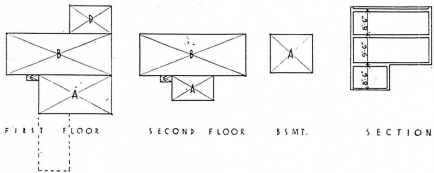
F I R S T F L O O R P L A N



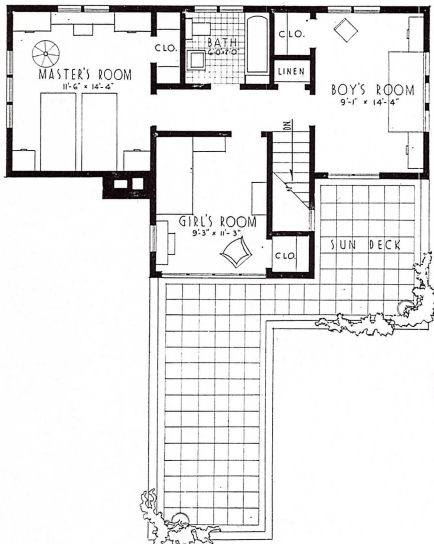
P L O T P L A N

	CU. FT.
BASEMENT	
A- 14 x 13.25 x 8.5 =	1,576.
FIRST FLOOR	
A- 23.5 x 12.5 x 9.5 =	2,790.62
B- 35.5 x 14.5 x 9.5 =	4,832.79
C- 4 x 17.5 x 9.5 =	66.5
D- (PORCH) 9 x 14 x 9.5 x 14 =	299.
SECOND FLOOR	
A- 8.5 x 13.75 x 8.5 =	983.44
B- 35.5 x 14.5 x 8.5 =	4,323.39
C- 4 x 17.5 x 10.5 =	73.5
TOTAL	14,945.80

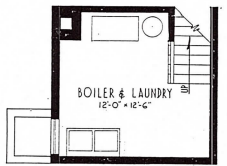
C U B A G E



F I R S T F L O O R S E C T I O N S E C T I O N



S E C O N D F L O O R P L A N



B S M T P L A N

RETURN TO
M-G-M ART
DEPT.



W E S T E L E V A T I O N



N O R T H E L E V A T I O N

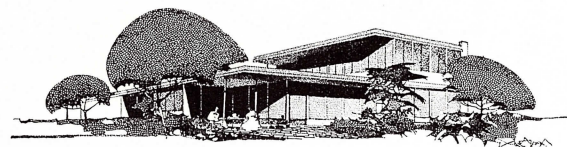
A higher ranking, possibly first prize, might have been awarded this entry had the garage not arbitrarily split the plot in two. The dignity of the design impressed the jurors as did the logic of the second floor plan.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

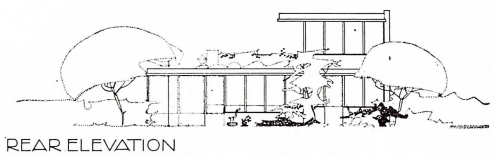
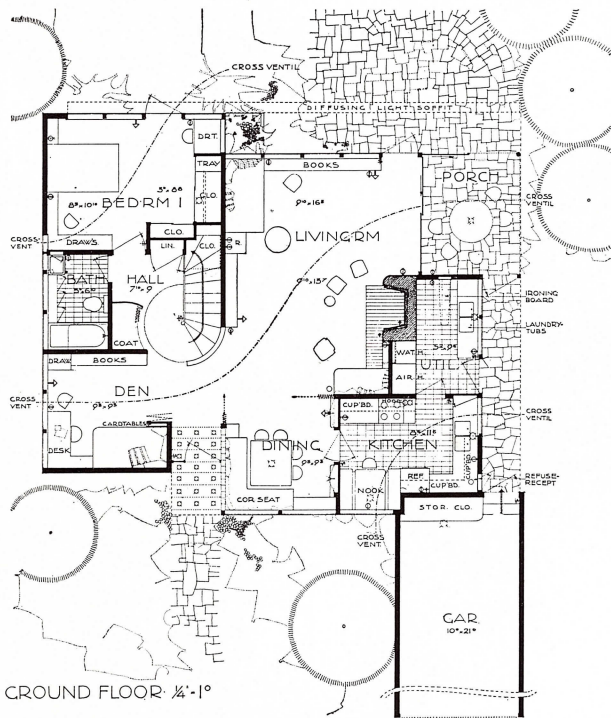
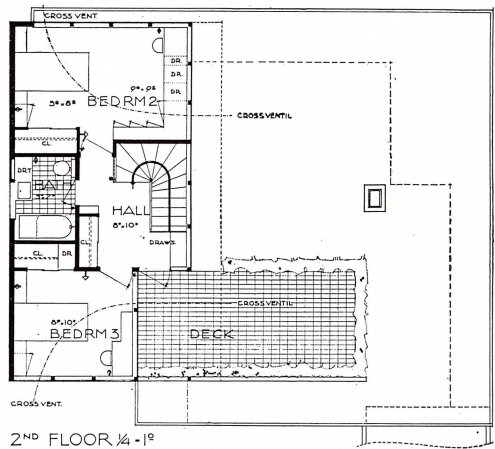
\$1000 PRIZE: RICHARD J. NEUTRA, LOS ANGELES, CALIFORNIA



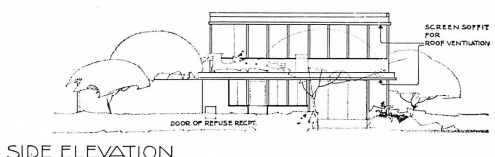
FRONT VIEW



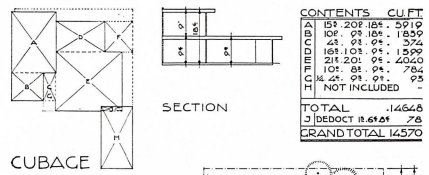
GARDEN VIEW



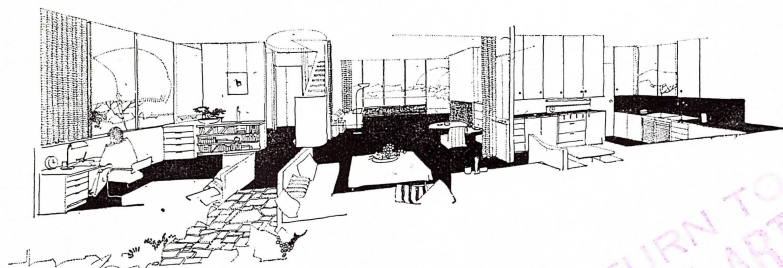
REAR ELEVATION



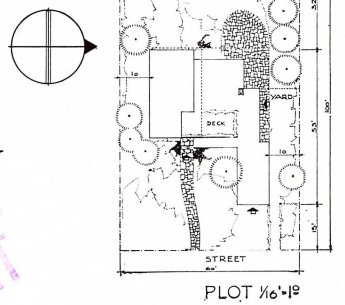
SIDE ELEVATION



CONTENTS	CUB
1st 20' 18" 5' 10"	
10' 8" 0' 10" 15' 5"	
6' 3" 0' 10" 5' 4"	
18' 10' 10" 15' 5"	
21' 20' 0' 20' 0"	
10' 0' 0' 0' 7' 0"	
16' 0' 0' 0' 0' 0"	
NOT INCLUDED	
TOTAL	14646
3 BEDROOM 8.6' 8' 1"	75
GRAND TOTAL	14570



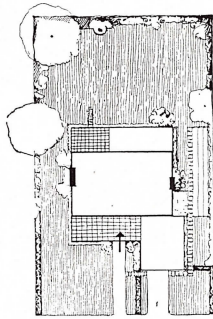
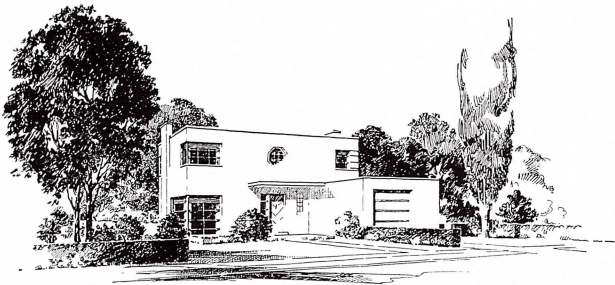
RELATION OF ROOMS



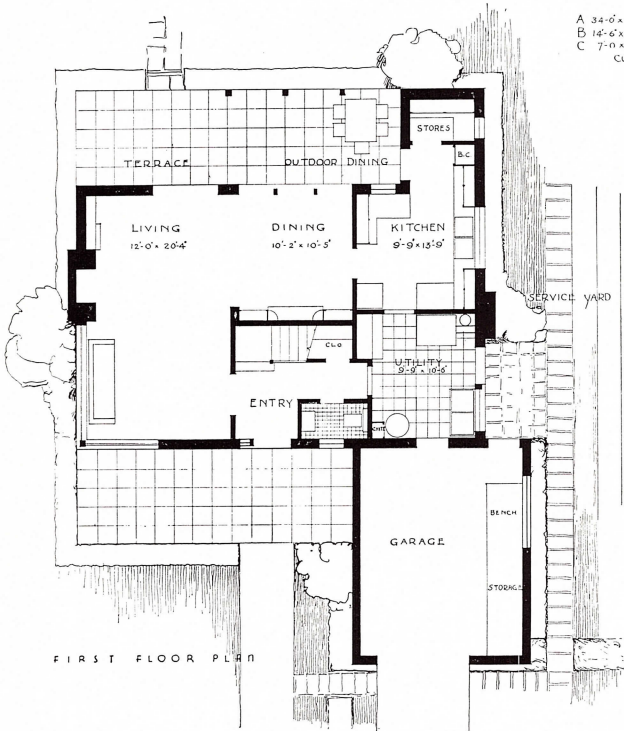
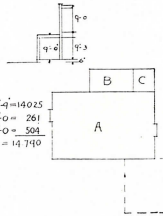
An outstanding example of open modern planning, noteworthy for the provision for bedroom, bath, and den on the first floor; the two bedrooms and bath with open terrace on the second. Considered at length for first place, it was demoted to second prize because of the comparatively high cost of building it in sections which have rigorous climates.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

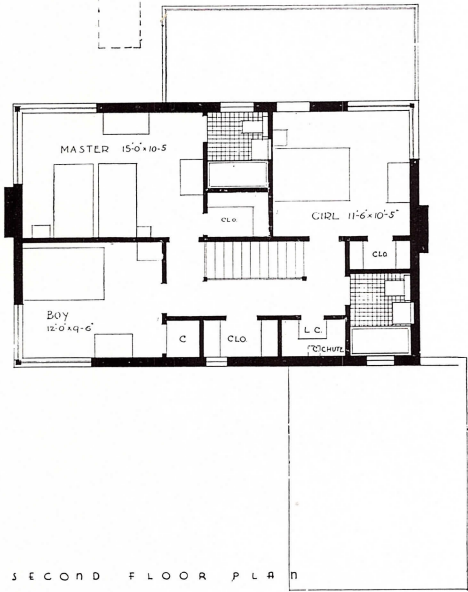
\$1000 PRIZE: WILLIAMS BROTHERS, DETROIT, MICHIGAN



PLOT PLAN



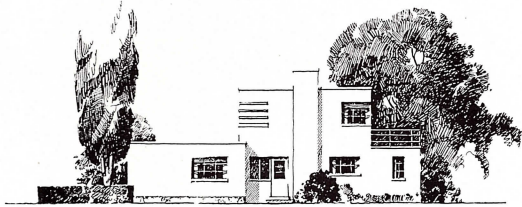
FIRST FLOOR PLAN



SECOND FLOOR PLAN



W E S T



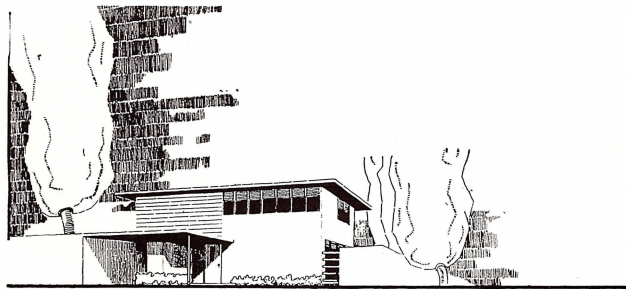
N O R T H

RETURN TO
M-G-M ART
DEPT.

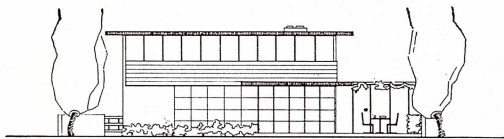
This scheme was repeated with slight variations many times among the 700 entries. The advantage which this held over the others was derived from its provision for two bathrooms, cross ventilation in the kitchen, and extremely livable bedrooms. Cognizance was also taken by the jury of the work area in the garage and the outdoor dining space.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

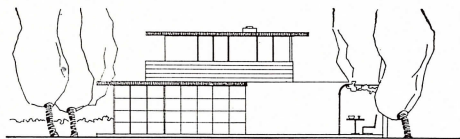
\$1000 PRIZE: JOHN HIRONIMUS, NEW YORK CITY



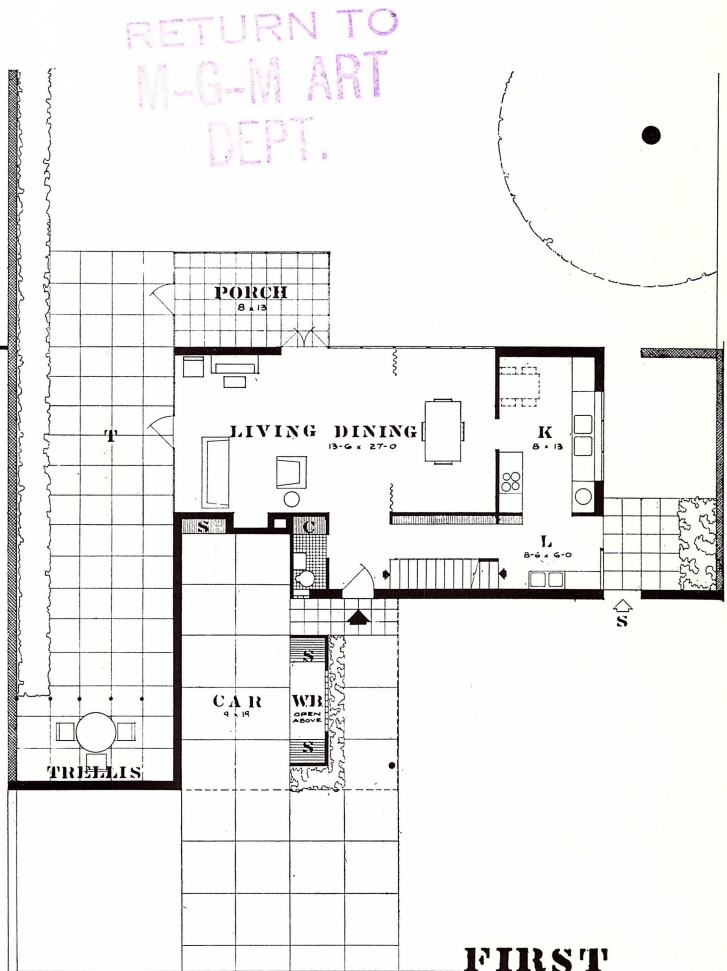
PERSPECTIVE



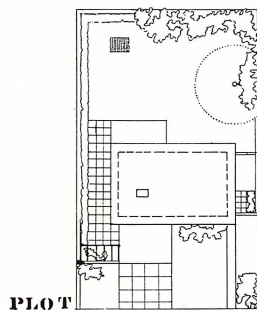
WEST



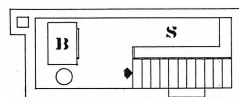
SOUTH



FIRST



PLOT

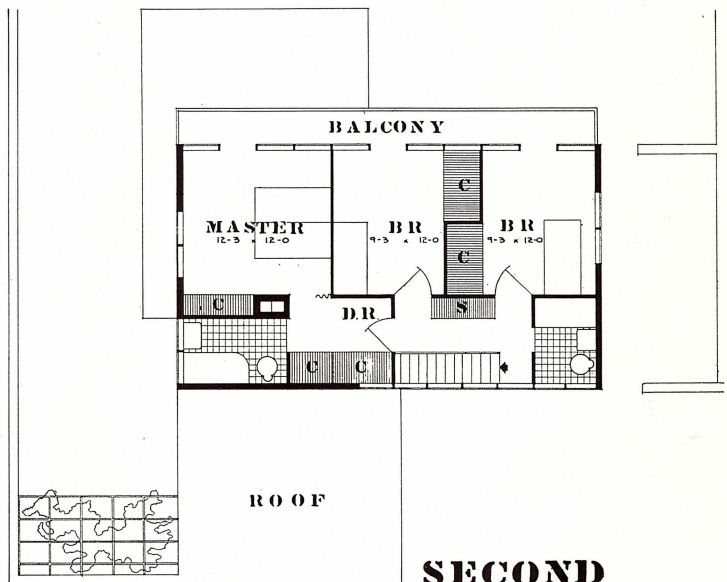
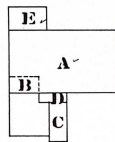
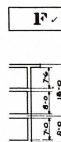


BASEMENT

CUBAGE DIAGRAMS



A	21 x 36 x 10	13408
B	56 x 10 x 8-6	13788
C	13 x 6 x 9 x 1/4	175
D	3 x 9 x 9 x 1/4	61
E	13 x 8 x 8-6 x 1/4	221
F	7-6 x 18 x 6	1080
TOTAL		14677

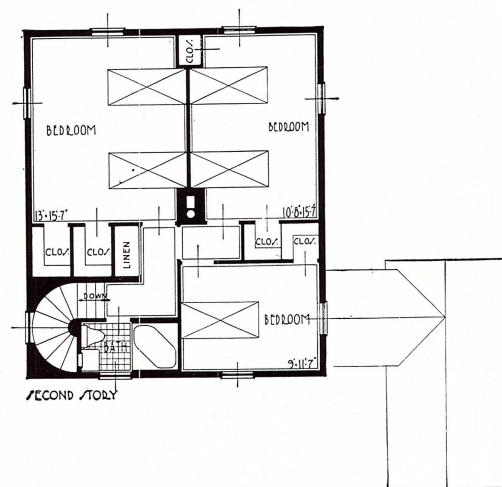
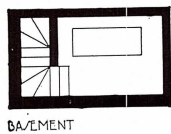
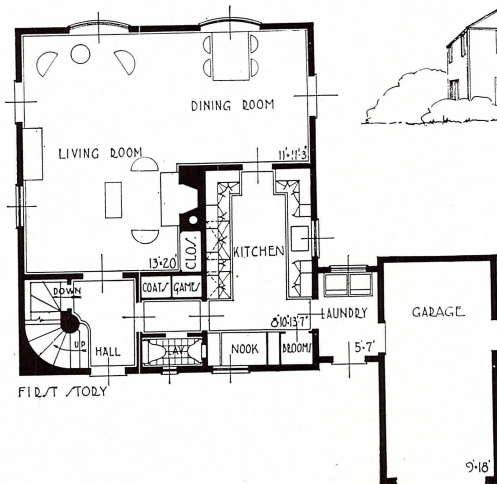
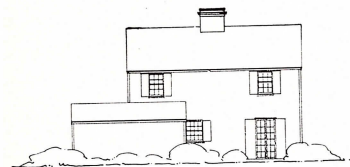


SECOND

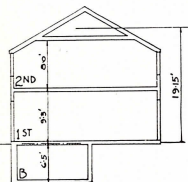
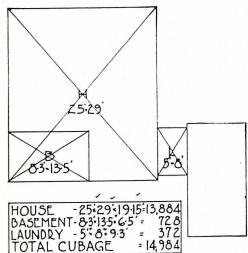
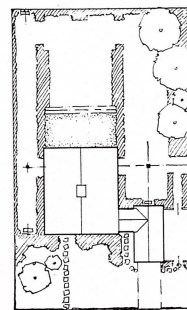
Chosen for second prize partly because the second floor plan, including two bathrooms, 6 closets, and a dressing room (besides the three bedrooms), stood out over the other entries. Downstairs the plan follows the familiar pattern of modern simplicity. Supplementary eating space in the kitchen was commended by the jury. A further reason for its premiation was the distinctive design of its exterior.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

\$1000 PRIZE: JOHN DONALD TUTTLE, NEW YORK CITY



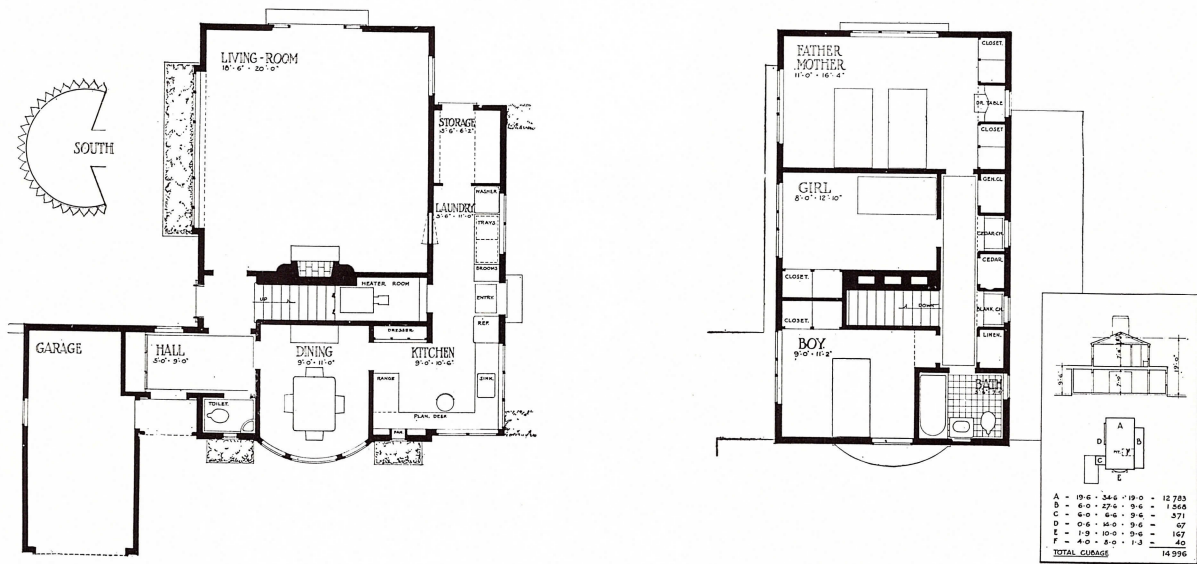
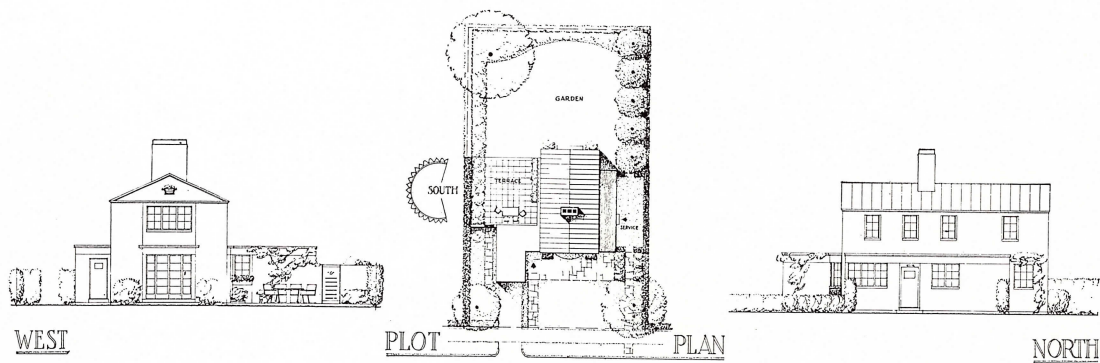
RETURN TO
M-G-M ART
DEPT.



Despite the uninteresting appearance of the elevation, the jury commended this entry for the simplicity of its plan. A minimum amount of partitions, large bedroom areas are some of its creditable points. Due credit was given the entry for provision of ample storage space.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

\$250 PRIZE: OWEN LAU GOWMAN, NEW YORK CITY



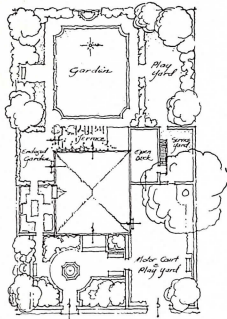
A	-	19'-6"	-	34'-6"	-	19'-0"	-	12'-783
B	-	8'-0"	-	27'-6"	-	9'-6"	-	1566
C	-	8'-0"	-	8'-6"	-	9'-6"	-	371
D	-	0'-6"	-	14'-0"	-	9'-6"	-	67
E	-	1'-2"	-	10'-0"	-	9'-6"	-	167
F	-	4'-0"	-	8'-0"	-	1'-3"	-	40
TOTAL GARAGE								14,996

This was easily the most controversial house among the prize winners. Ranked first by one juror, it was opposed for any mention by another. It provides a separate dining room, a remarkable amount of closet space, and has a rather distinguished traditional appearance. Its kitchen shows full understanding of a homemaker's problems, and it might have ranked higher had it not been for the seemingly avoidable waste areas in the corridors.

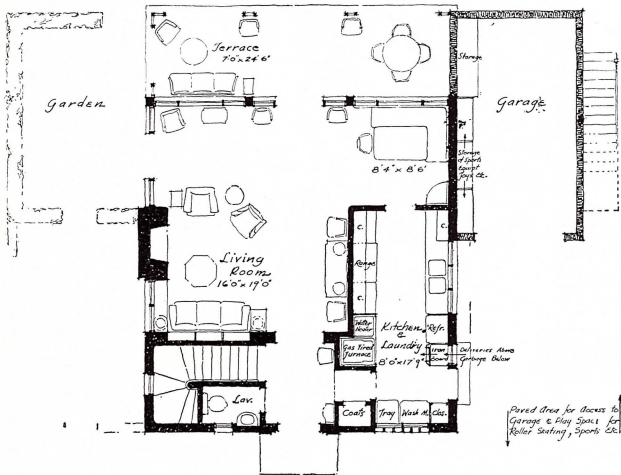
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT



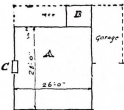
Front View



Plot Plan



First Floor



Cubage

A 26'0" x 26'0" (19'4"	19,318
B 10'0" x 26'0" (14'	128
C 20'0" x 10'0" (12'	128
D 10'0" x 10'0" (12'	128
Total	14,580



Second Floor



West

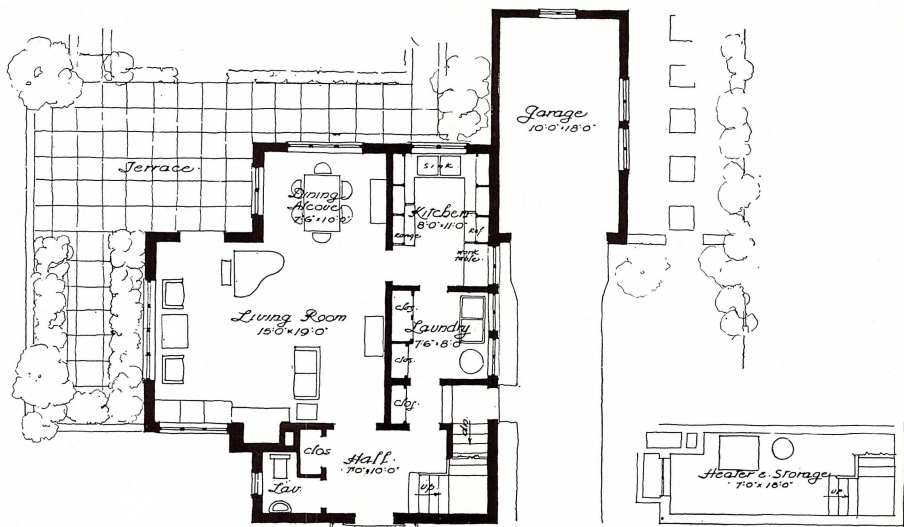


North

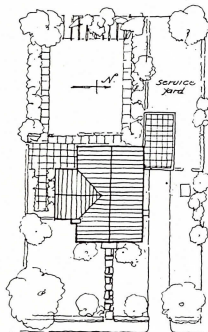
RETURN TO
M-G-M ART
DEPT.

The jury recognized the inherent economy in this square plan, a fitting answer to the competition's theme "the judicious enclosure of the greatest amount of usably convenient living area within the cubage limitation." It is further distinguished by its open first floor plan and by the livableness of the three upstairs bedrooms.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT



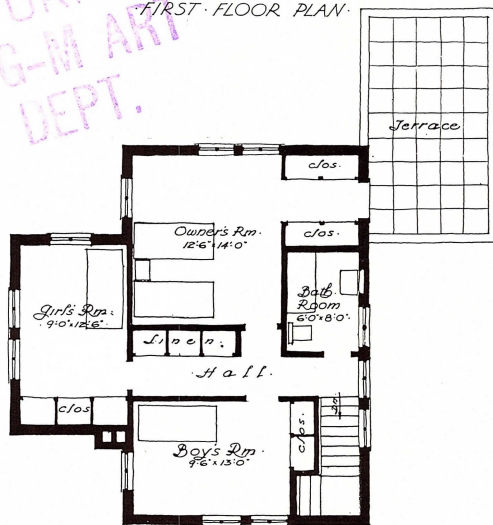
FIRST FLOOR PLAN



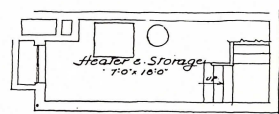
PLOT PLAN



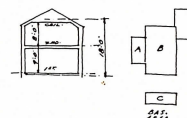
NORTH ELEVATION



SECOND FLOOR PLAN



BASEMENT PLAN



CUBAGE		
A	10'-0" x 9'-0" x 10'-0"	2,873.0
B	20'-0" x 9'-0" x 10'-0"	11,740.0
C	20'-0" x 9'-0" x 10'-0"	11,740.0
TOTAL		36,353.0



WEST ELEVATION

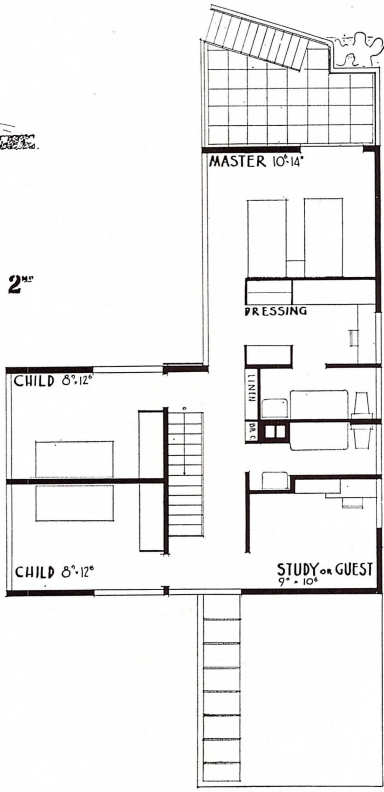
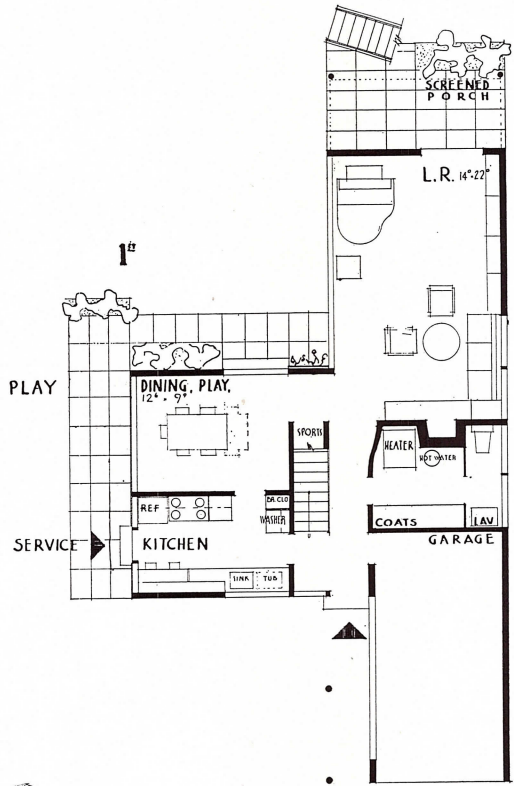
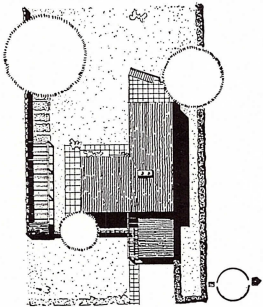
A traditional house which sacrifices nothing in plan, convenience, and economy to tradition. An extremely pleasant L-shaped living room and efficient U-shaped kitchen and abundance of closet areas were commented favorably upon by the jurors.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

\$100 PRIZE: MARC PETER, JR., and HUGH STUBBINS, BOSTON, MASS.

CUBE

C	A-D-315 • 19 • 17.5 • 10020.25
B	B-15 • 18 • 17.5 • 4725.00
C	C-75 • 15 • 84 • 225.00
A	TOTAL 14,970.25
D	(D-11-825-5 • 455)

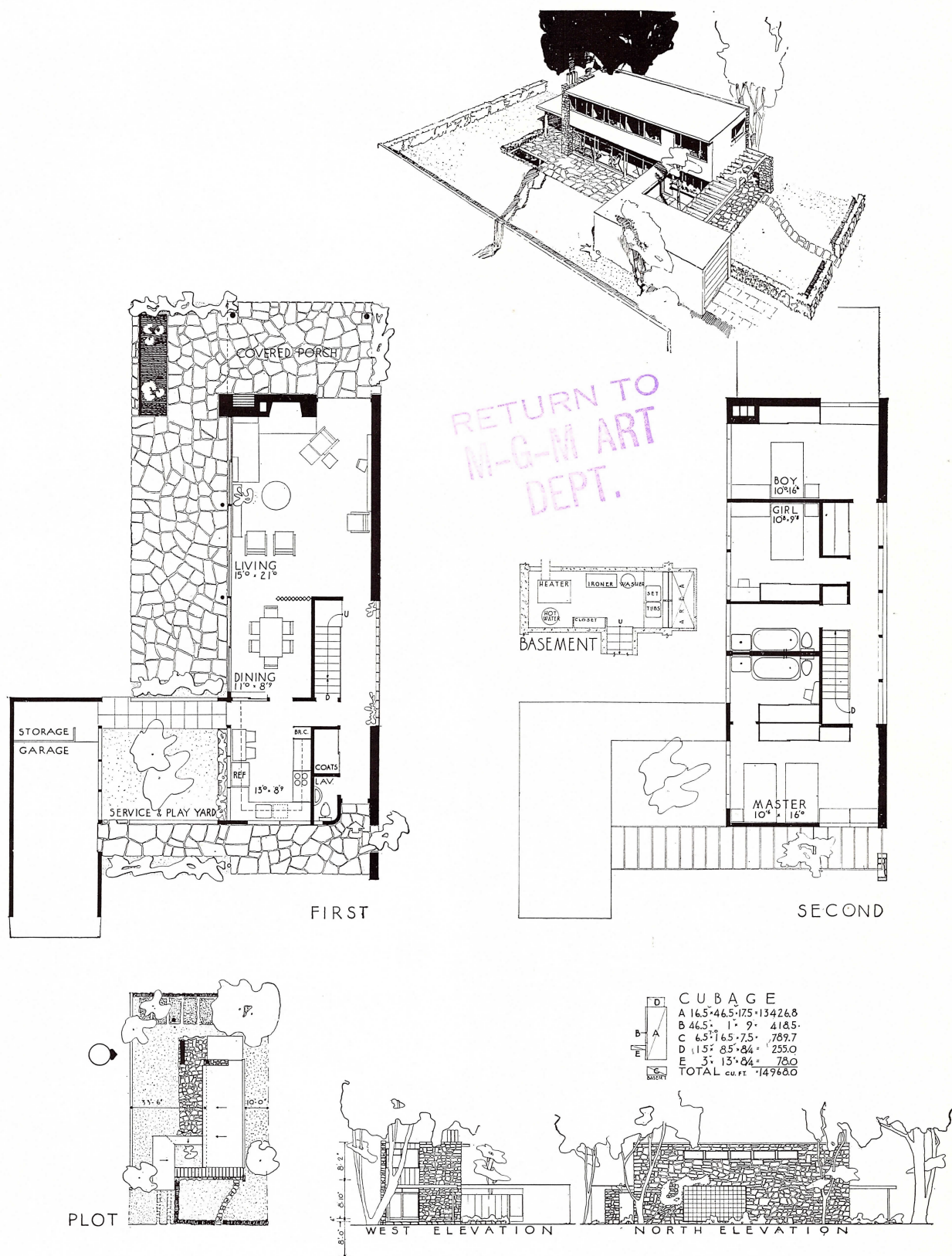


RETURN TO
M-G-M ART
DEPT.

A study, a large dressing room, and two bedrooms are here provided by minimizing the size of the bedrooms. One of the most interesting plans submitted, it would have ranked higher had the elevations been more pleasing. The judges did not approve of the outside staircase, and penalized the entry for its lack of closet area.

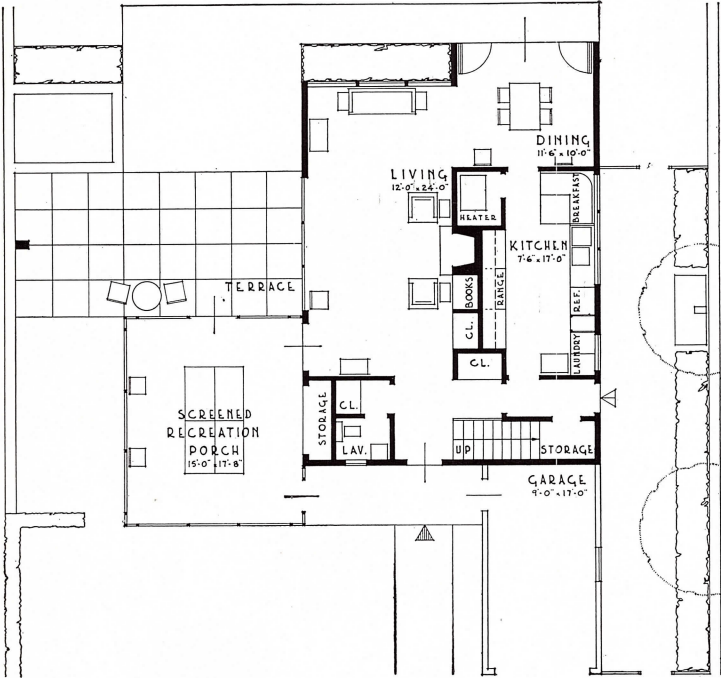
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

\$50 PRIZE: HUGH STUBBINS and MARC PETER, JR., BOSTON, MASS.

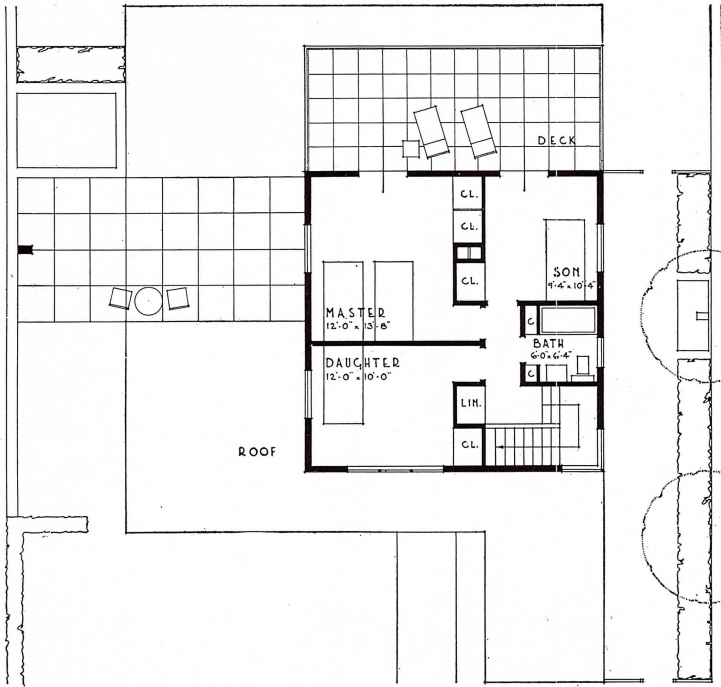


One of the best examples of the most common scheme entered in the competition. Too much space devoted to corridors prevented it from earning higher recognition. The plan of the kitchen, which conveniently overlooks service and play yard, is excellent, as are the possibilities for interesting furniture grouping in the living room.

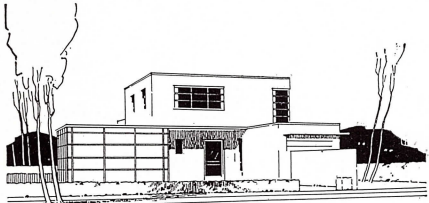
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT



FIRST FLOOR PLAN



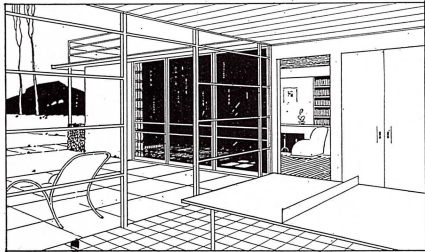
SECOND FLOOR PLAN



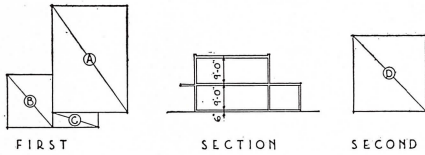
STREET PERSPECTIVE



GARDEN PERSPECTIVE

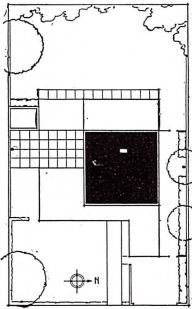


PERSPECTIVE OF SCREENED PORCH AND TERRACE.



CUBAGE			
A	25'-0" x 35'-6" x 9'-6"	=	8,432
B	15'-0" x 17'-8" x 9'-0" ÷ 4	=	596
C	15'-0" x 5'-0" x 9'-0" ÷ 4	=	169
D	25'-0" x 25'-0" x 9'-0"	=	5,625
TOTAL		=	14,822

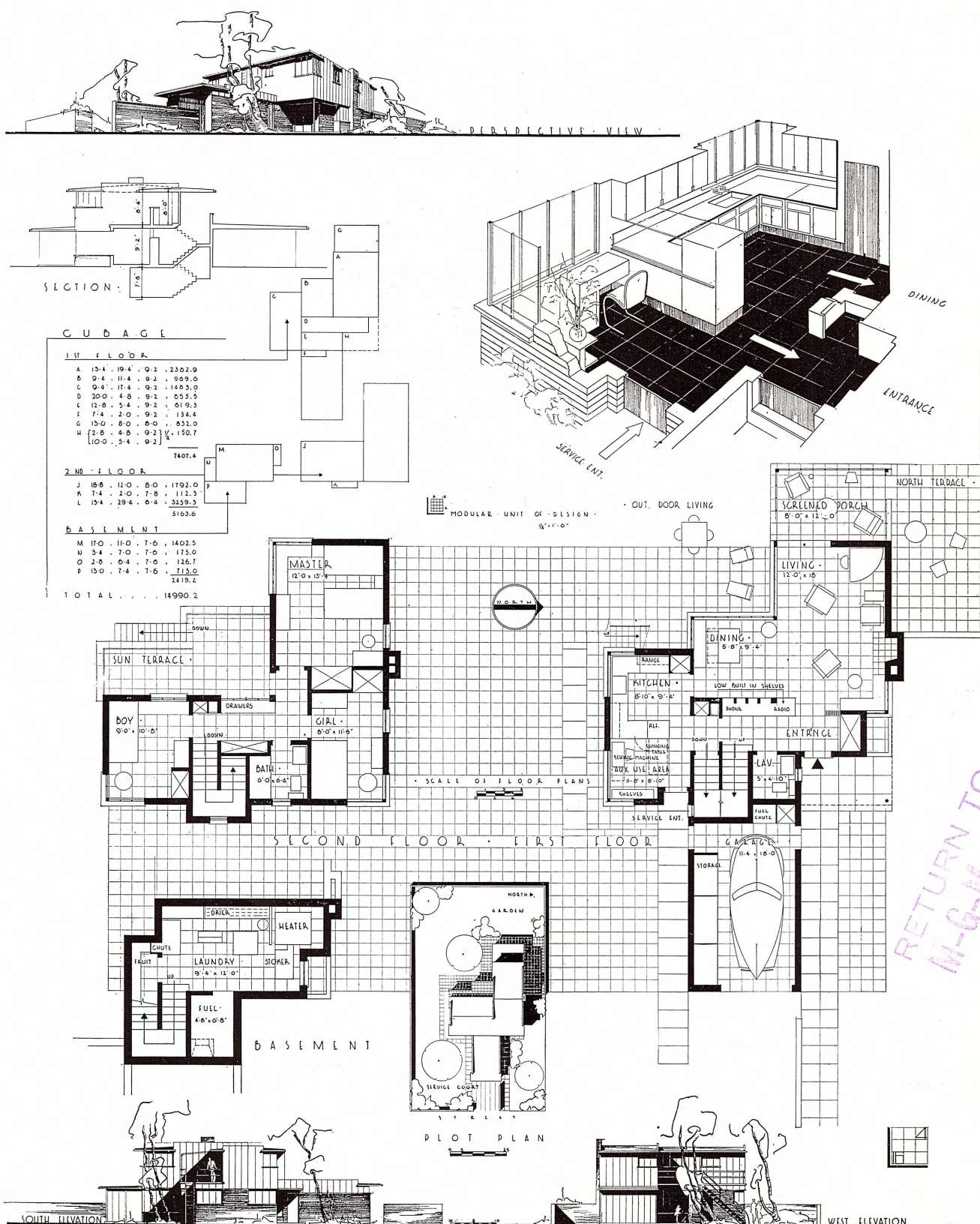
RETURN TO
M-G-M ART
DEPT.



PLOT PLAN

This is an excellent example of the simplest scheme which answered the problem. The screened recreation porch is a pleasant feature, and had there been adequate provision made for the laundry and heater a higher ranking might have been the result.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

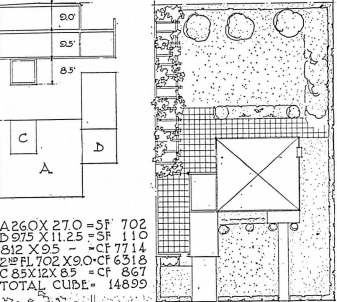


One of the most distinguished schemes presented, this house in the judges' opinion could have more interesting elevations without destroying the virtues of the plan. It was commended for its auxiliary space adjacent to the kitchen, for the interesting combination of the living room-dining room, and for its general recognition of housekeeping requirements.

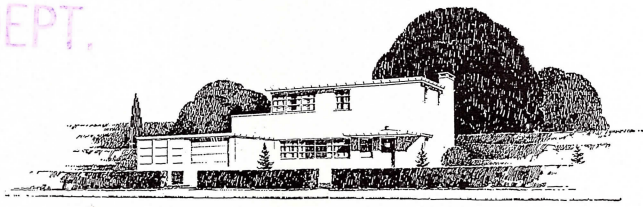
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

\$50 PRIZE: JOHN EKIN DINWIDDIE, SAN FRANCISCO, CALIF.

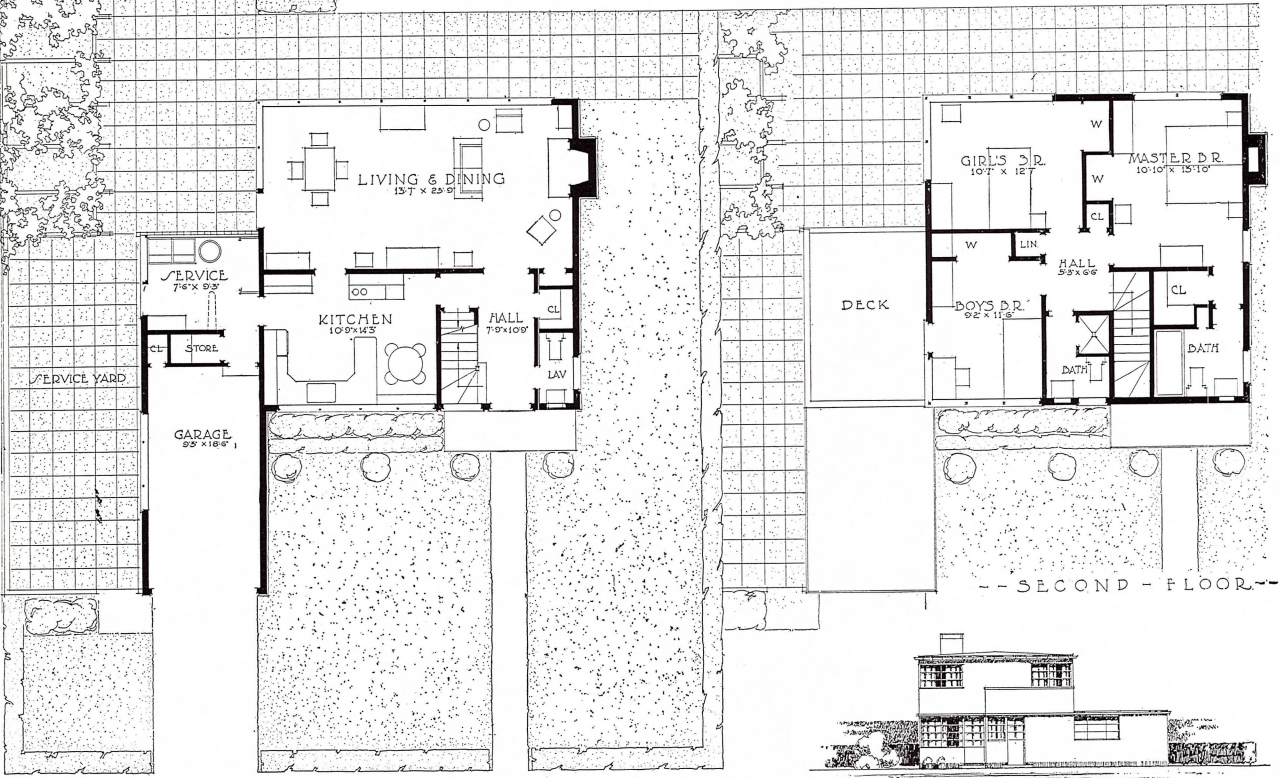
COMPUTATIONS AND PLOT PLAN



RETURN TO
M-G-M ART
DEPT.

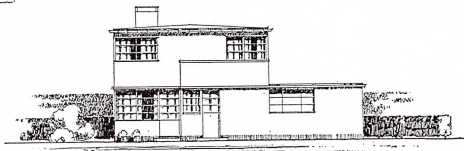


- PERSPECTIVE VIEW FROM THE NORTH EAST -

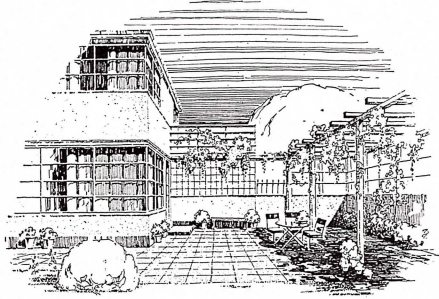


FIRST FLOOR

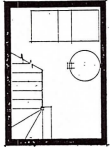
-- SECOND FLOOR --



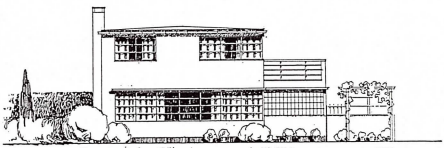
- SOUTH ELEVATION -



- - OUTDOOR - LIVING - -



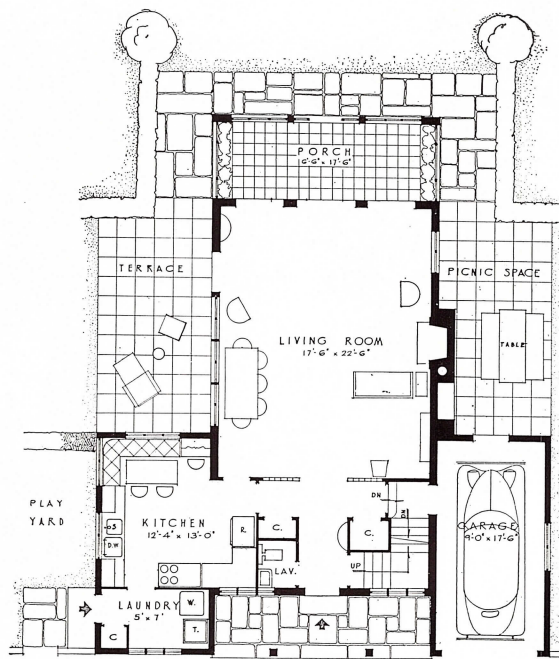
- - BASEMENT - -



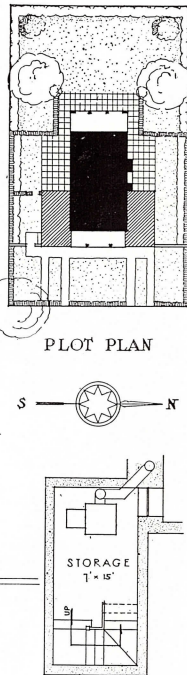
- - WEST ELEVATION - -

An excellent variation of a familiar parti. The factors which influenced the jury in awarding it a mention were the importance given to closet space, the separation of the master bedroom wing from the other two bedrooms, and the inclusion of a small additional bath on the second floor.

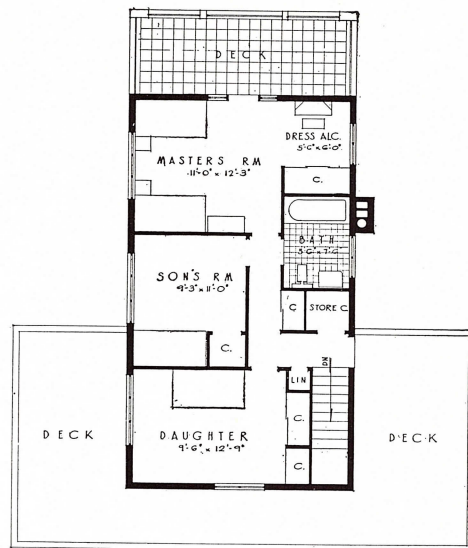
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT



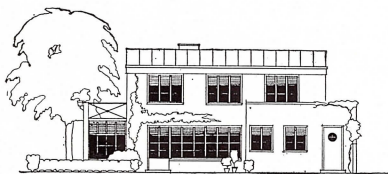
FIRST FLOOR PLAN



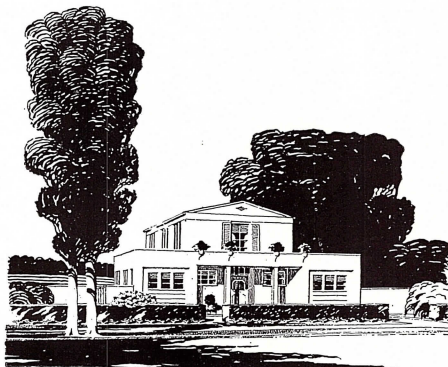
CELLAR PLAN



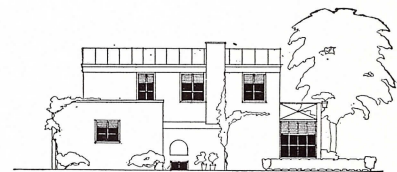
SECOND FLOOR PLAN



SOUTH ELEVATION



STREET ELEVATION



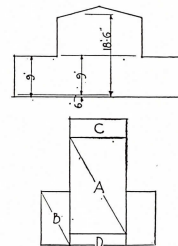
NORTH ELEVATION



WEST END OF KITCHEN



WEST ELEVATION



~ CUBAGE ~

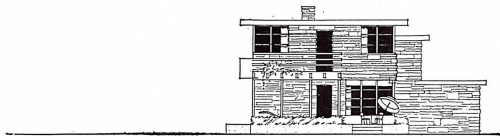
A	19'-35" x 18'-6"	11600
B	18'-0" x 6'-9"	1604
C	19'-7" x 8'-1/2"	239
D	18'-5" x 9'-1/2"	203
CELLAR	8'-6" x 6'-7-3/4"	1044
CHIMNEY		179
TOTAL CUBAGE		14929 C.F.

RETURN TO
M-G-M ART
DEPT.

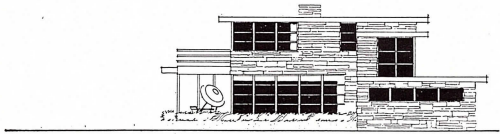
Different in both plan and elevation from the other entries in the competition, this won the judges' approval for its interesting second floor plan which featured a dressing alcove off the master bedroom and adequate closet and storage space. Some doubt about the convenience of the size of the living room was expressed by the judges, and it was felt that in a small house the formal treatment might not construct as well as it appears in perspective.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

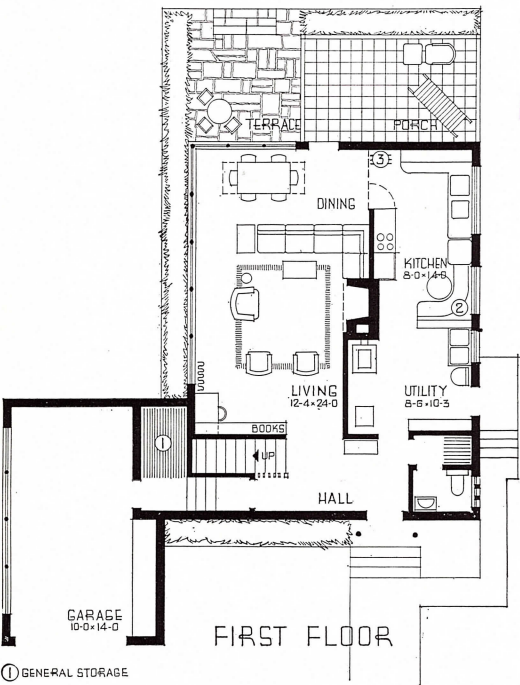
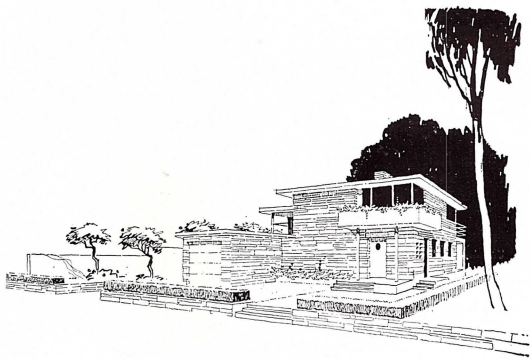
\$50 PRIZE: ALAN S. ROBINSON, WINNETKA, ILL.



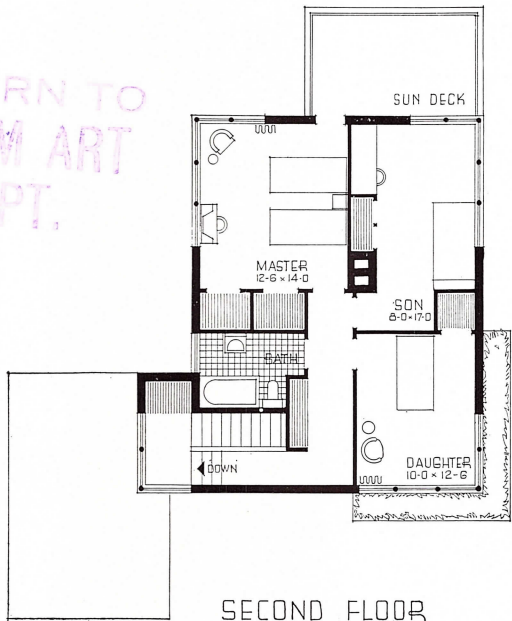
WEST ELEVATION



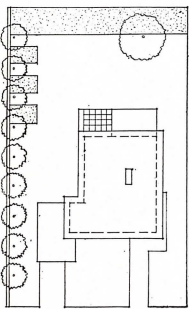
SOUTH ELEVATION



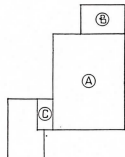
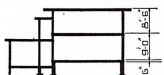
FIRST FLOOR



SECOND FLOOR

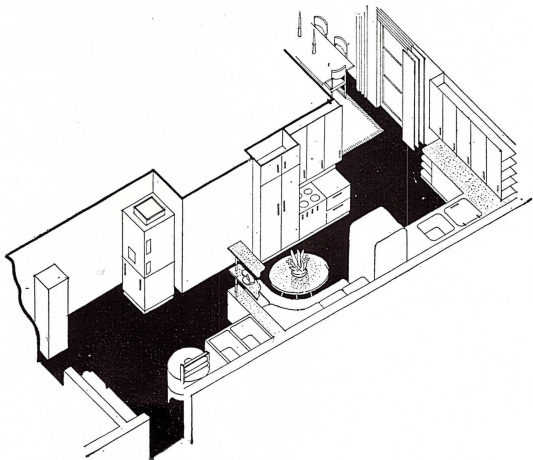


PLOT PLAN



A 24'-5" x 31'-5" x 18'-0" 13892
B 9'-0" x 15'-0" x 8'-6" 293
C 10'-0" x 4'-6" x 18'-0" 810

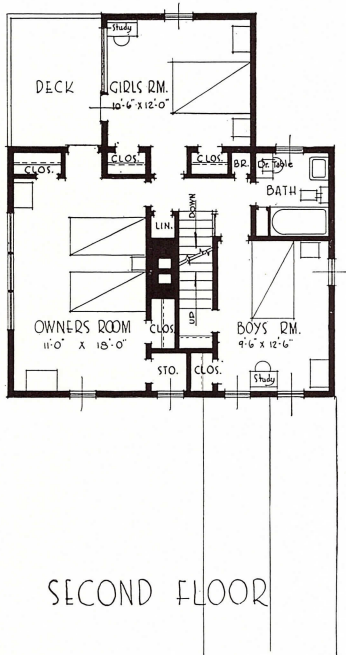
TOTAL CUBAGE - 14,995 cu



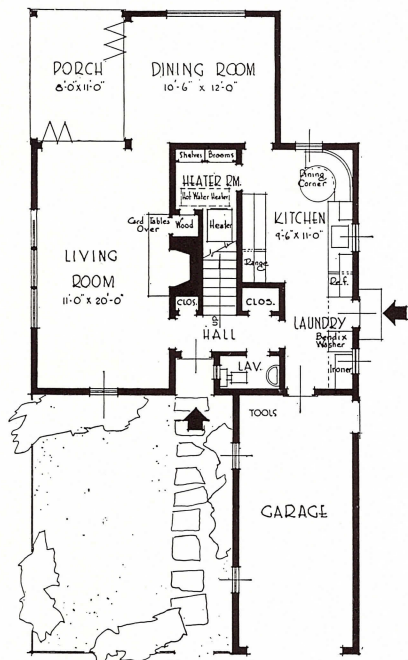
One of the few successful treatments of a house whose ventilation is handled by corner windows. The plan is not fussy, and most of the requirements of the competition are adequately met. A better kitchen plan would have been desired.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

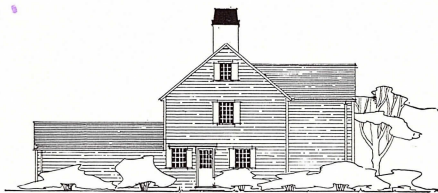
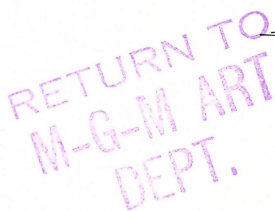
\$50 PRIZE: ROYAL BARRY WILLS, BOSTON, MASS.



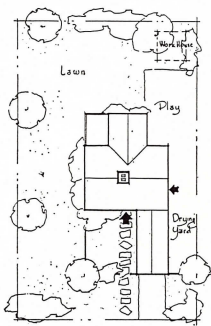
WEST ELEVATION



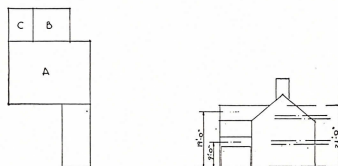
FIRST FLOOR



NORTH ELEVATION



PLOT PLAN

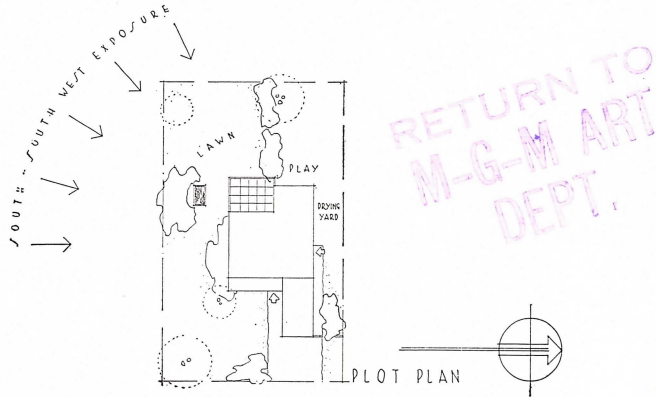
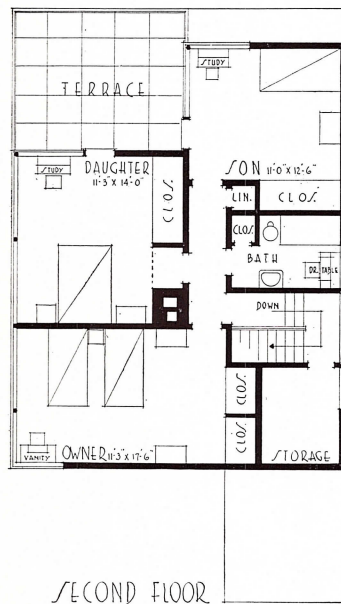
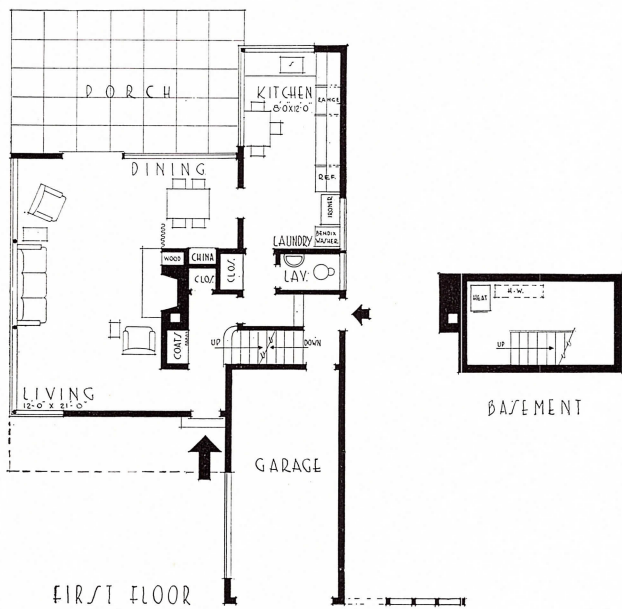
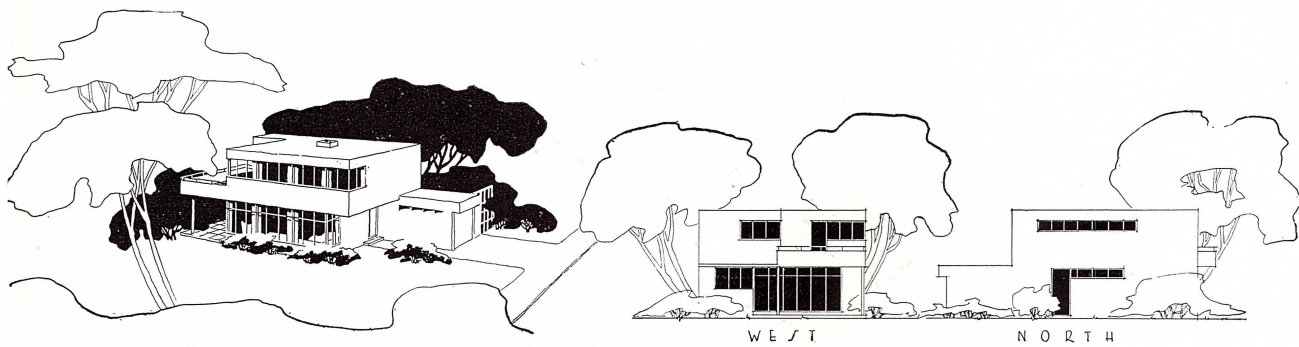


A — 21'-0" x 27'-0" x 21'-0"	—	11,907	CUBIC FEET
B — 11'-0" x 13'-0" x 14'-0"	—	2,711	" "
C — 8'-0" x 11'-0" x 9'-0"	—	198	" "
TOTAL CUBAGE	—	14,822	CUBIC FEET

One of the few houses which recognized local preference for a separate dining room, this house is further distinguished for the freedom of plan within a traditional exterior. All the units are intelligently related, and there is evidence of an intimate understanding of the actual problems of running a household.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

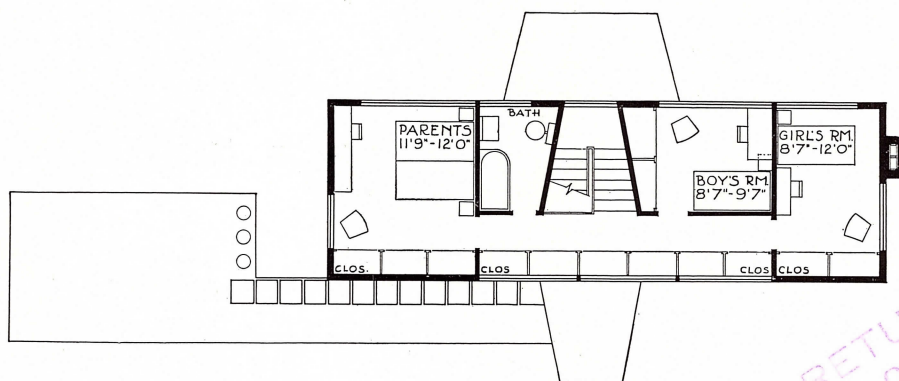
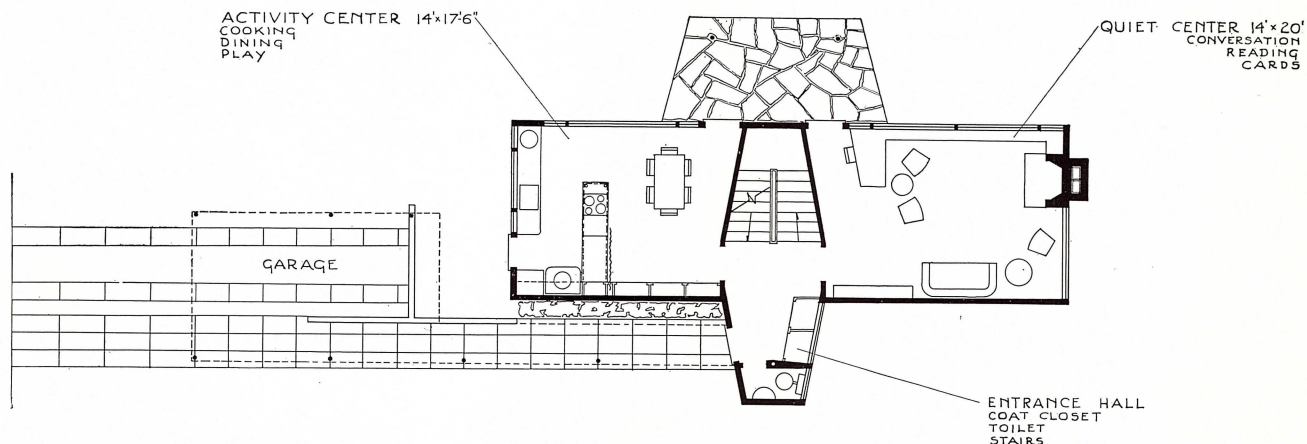
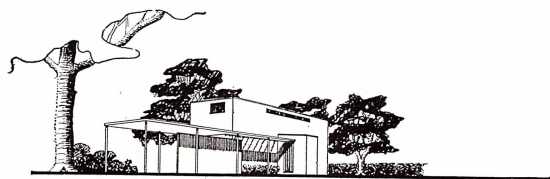
PRIZE: ROYAL BARRY WILLS, BOSTON, MASS.



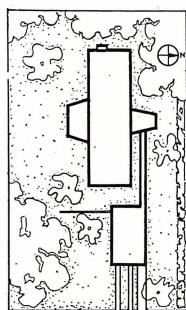
CUBAGE		
A	10'-0" x 25'-0" x 11'-6"	2820 CUBIC FEET
B	9'-0" x 9'-0" x 17'-6"	1417 " "
C	4'-6" x 9'-0" x 9'-0"	360 " "
D	12'-0" x 19'-0" x 9'-0"	513 " "
E	4'-0" x 16'-0" x 17'-6"	1260 " "
F	4'-6" x 16'-0" x 9'-0"	724 " "
H	8'-6" x 10'-0" x 9'-0"	765 " "
BASEMENT	8'-0" x 13'-0" x 8'-6"	884 " "
TOTAL		14740 CUBIC FEET

Bedrooms planned to accommodate a growing family helped to earn a mention for this entry. A large storage closet so often overlooked in flat-roofed houses was another distinguishing feature. Other than that, the general scheme was good small house planning logic.

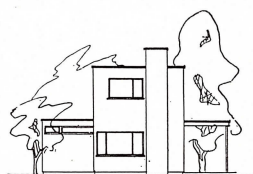
SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT



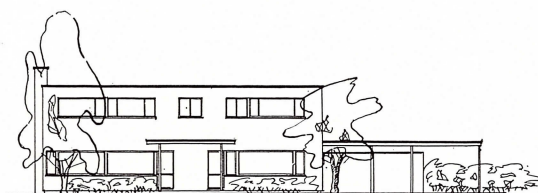
RETURN TO
M-G-M ART
DEPT.



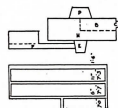
PLOT PLAN



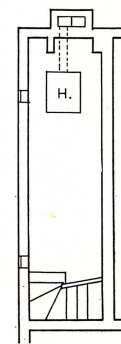
WEST ELEVATION



SOUTH ELEVATION



	H'	L'	W'	CUBE
HOUSE	17-7	46-6	15-0	12,320
ENTRANCE PORCH	8-5	8-5	7-2	564
FRONT WALK	8-5	4-5	3-2	300
BASEMENT	7-5	25-2	8-0	1500
CHIMNEY	22-0	3-5	1-0	114
TOTAL CUBE 14,992				



BASEMENT

The judges regarded this entry as one of the most interesting schemes submitted in the entire competition. It was vigorously opposed and approved. Some felt the stairway was a definite loss of usable space, that in general the areas themselves were sacrificed to the idea behind the scheme. There was also some doubt as to the practicability of the open car shelter.

SCALE FLOOR PLANS
1/16" EQUALS ONE FOOT

within the frame panels insulate the shell, conserve heat. Panels similarly assembled make up the roof which is waterproofed with a "built-up" covering.

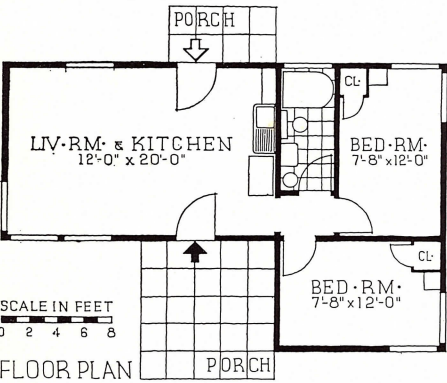
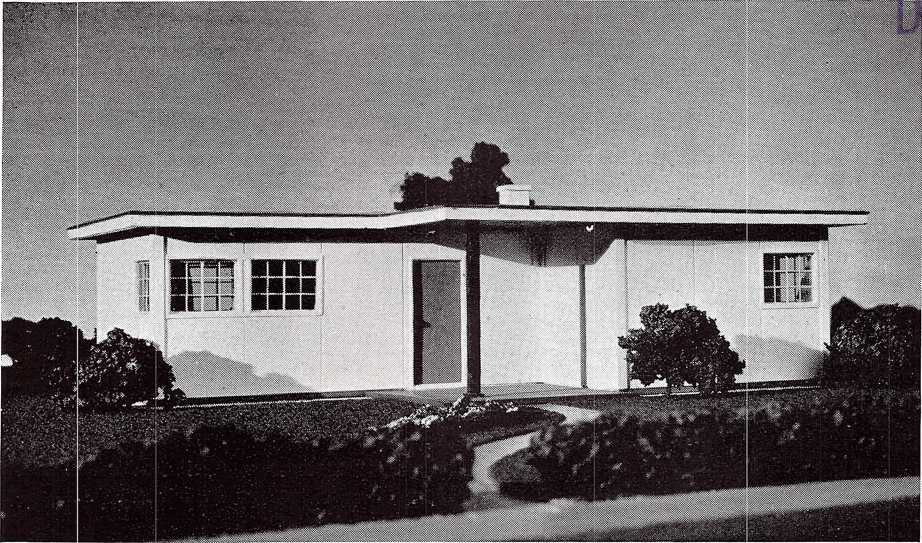
But satisfactory design was only half the solution to the problem of producing this minimum house—construction costs had to be correspondingly low. To prove that they were, Watson set about obtaining a complete non-labor cost breakdown (materials and overhead) backed by firm bids. Cooperation of General Robert E. Wood of Sears Roebuck greatly facilitated this operation, gave Watson basis for predicting that costs would come to \$700 for materials, \$100 for overhead, and \$100 for equipment and incidentals—a total of \$900 for non-labor expenditures. Final construction bids on the houses, subsequently received, verified this prediction; and, interestingly, took a large share of the business away from Sears Roebuck. Labor, both for prefabrication and assembly of houses will be WPA, will approximate \$400 per unit.

Reaction. At this stage in the developments the untried scheme—land acquisition and prefabricated minimum house—was ready for submission to the public. With assurance that FHA would insure a blanket mortgage on a group of 50 of these houses and that WPA would supply all necessary labor, three Fort Wayne mortgage lenders agreed to put up the capital. The Mortgage Loan Committee of the Lincoln National Life Insurance Co. started the ball rolling, and two banks, the Lincoln National and the Fort Wayne National, followed suit, each committing itself to one-third of the mortgage. Endorsement of the plan also came from the local Real Estate Board, the Building Contractors' Association, the Material Men's Association and the city's

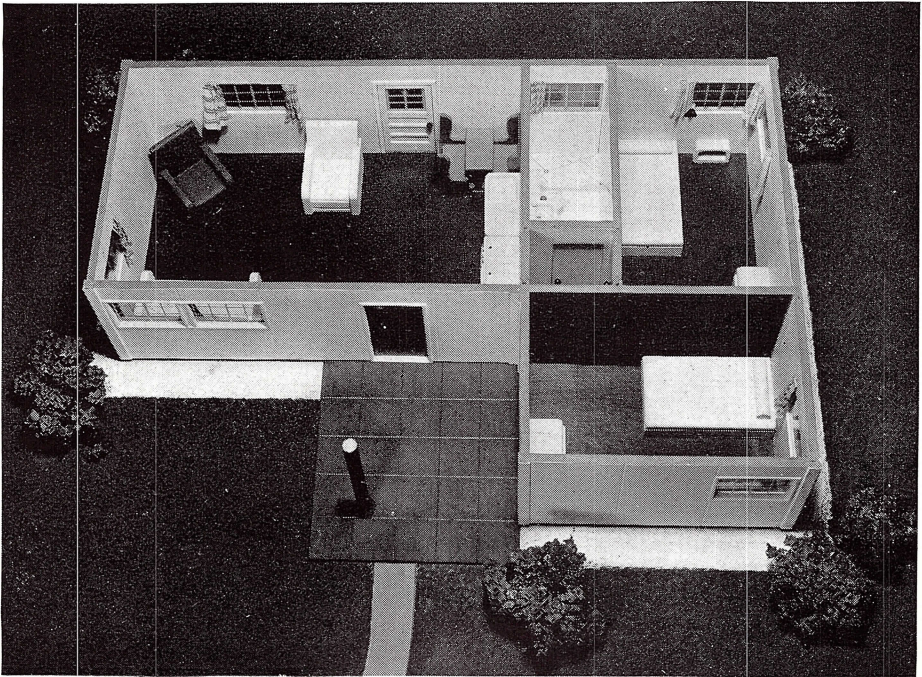
FINANCIAL STATISTICS 50-HOUSE PROGRAM

LAND—assumed value—\$40 per lot.....	\$ 2,000
LABOR—value of \$43,000 WPA work.....	23,000
<hr/>	
TOTAL EQUITY.....	25,000
MATERIALS—mortgage loan.....	45,000
<hr/>	
TOTAL FAIR VALUE—on completion.....	70,000
<hr/>	
Gross annual income (rent at \$2.50 per week).....	6,500
Tenant movement loss—4%.....	260
Net Income.....	6,240
Capital charges.....	3,600
Upkeep—(\$32 per house).....	1,600
Repainting (4 years).....	\$500
Reroofing (10 years).....	270
Equipment replacement.....	150
Insurance.....	80
Management, etc.	600
Annual surplus	\$ 1,040
<hr/>	
PERCENTAGES:	
Mortgage to total fair value.....	64.3%
Capital charges to gross income.....	55.4%
Capital charges to net income.....	57.7%
Upkeep expenses to net income.....	25.6%
Annual surplus to net income.....	16.7%

RETURN TO
M-G-M ART
DEPT.



Simplicity in design, construction and equipment and prefabrication with WPA labor were combined by FHA's Housing Economist Frank Watson to produce this plywood house for Fort Wayne's housing authority at an estimated cost of \$1,300.



two newspapers. Only group to object was the AFL which complained of the use of WPA labor and unconventional construction methods. Labor's objections were met when the Housing Authority explained that this plan was for Fort Wayne merely a necessary stepping stone to the Labor-endorsed USHA program.

Evidence of the scheme's acceptance by the lay public is the fact that by mid-August—within a few days after it had been given publicity—more than enough lots had been tendered to the Authority to take care of its initial 50-house program. One individual offered the Authority seven lots which had been held by his family for 70-odd years and on which all taxes had been paid. Several others offered properties which had proved to be tax burdens for more than 30 years. It has been found that local industrial concerns are the easiest landowners with which to deal, many of them owning vacant lots and lots harboring residential derelicts.

Disappointing to the Authority was the fact that but few of the tendered lots had buildings on them. Apparent reason was that, with the existence of an acute low rental housing shortage, even the worst of slum houses were making money. Thus, one five-room Fort Wayne house without water closet was found to be tenanted four families each paying \$2 per week rent. To money-minded landlords, such investment is too productive to give away for \$1. In view of these conditions, it is likely that the majority of the houses in the Authority's 50-unit program will be built upon previously undeveloped land.

Program. Month ago this 50-house program emerged from the planning stage. Being the builder, the Fort Wayne Housing Authority leased 12,000 sq. ft. of factory space, purchased and installed tools and jig tables for the prefabrication of plywood panels. WPA labor was obtained to work under the supervision of the builder in this factory, to handle demolition, to prepare sites and to assemble houses. Chairman Hall's claim to "no increased cost to the taxpayer" is based upon this use of WPA labor in that the public pays for it no matter what it does; and it is better for WPA labor to build houses in which it may eventually live than to fritter away time on some less important project—like raking leaves.

While prefabrication is taking place, the Authority is analyzing the lots which have been submitted for its use. To be eligible they must front on a passable street, must be reasonably close to sewer and water connections, and since the concrete slab construction of the house's floor depends for dryness upon natural drainage, eligible lots must also be above street level. Furthermore, it had been considered unwise to take a large number of

(Continued on page 50)

BUILDING PUBLICIZED

in a national campaign. Local interests pay the bills.

WHILE others strive to revive Building via reduction of construction costs, The Producers Council, Inc., A.I.A. affiliate, shoots at the same target by attempts to prove that these costs are *not* too high. Bold claim is that "the greatest single bargain—the most outstanding value in America today is a new home." And, to back up its claims the Council is sponsoring a nation-wide newspaper campaign which graphically aims to prove that homebuyers in 1938 get 25 to 40 per cent more home for their money than they did in the norm year 1926.

Campaign. Incited year ago as *American Builder Magazine* began its editorial blasts on "More House for the Money Today," the campaign assumed more significant proportions a month later when Producers Council endorsed these blasts, announced that it would finance the cost of preparing and distributing advertising copy to newspapers interested in cooperating. The necessary capital was gleaned by touching a membership of 62 building material producers for voluntary contributions over and above annual dues. One of the first chunks of this capital was allotted to J. Walter Thompson and Co., New York advertising agency which prepared seven full-page newspaper advertisements. Typical examples are reproduced below. Computation of the somewhat vague percentage increase in house value is not based on a cost index, but rather on "16 extras" insulation, air conditioning, cheaper financing, et al.

It was not until mid-June that the wheels actually began to turn. At that time announcements of the Council's campaign were sent to 1,010 newspapers the

country over. They were informed that if they could round up sufficient local building material dealers to pay for seven full page ads, the Council would supply them with free mats—each one of which would provide space for the names of local sponsors. Realizing the necessity for continuous publicity, the Council made one stipulation: no mats would be sent unless sponsors would underwrite seven complete insertions, to run preferably one each week for seven weeks.

Although newspapers are the most important go-getters in the campaign, the Council solicited the promotional aid of the Department of Commerce and its 200 Building and Construction Committees to encourage the participation of local building interests. Moreover, the far-flung dealers of the Council's 62 members were asked to cooperate by chipping in toward payment of local advertising expenses. Ever-active Johns-Manville, currently nursing its Home Guild program, stepped in line, has since done more than its share of promotion via 3,000 J-M dealers.

Results. One half of the 1,010 newspapers originally circularized requested further information on the campaign. To them went a portfolio of sample advertisements and a list of potential types of sponsors. Later, as the names of actual sponsors began to trickle in, the list was revised to include such unanticipated prospects as mail-order house branches, laundries, and architects. Within three months after the initial mailing, 170 newspapers had raised \$225,000 for local programs. As if this were not a commendable record in itself, the Council states that 350 additional orders are pending, representing, in all, the 48 States.

First paper signed up was the Charlotte, N. C. *Observer*, which got 39 sponsors to kick in \$2,651 for the seven ads. Another example: a Sheboygan, Wis. paper obtained \$1,294 from 27 sponsors.

"OH, JOHN, IT'S OURS!"



...and just think—we may never have to move again—and nobody can raise our rent!"



Did YOU know that in today's home you get 25% to 40% MORE REAL VALUE for your money than in 1926?

THE OLD WAY TO FINANCE

THE NEW WAY TO FINANCE

Publication to Set Spacious Homes and Landscapes

—AND YOU GET MORE HOME for your money TODAY, too!





...actually, in Today's Home you get 25% to 40% MORE REAL VALUE

HERE'S WHY THE 1938 HOME IS A BARGAIN



Publication to Set Spacious Homes and Landscapes

THE AVERAGE FHA HOUSE

costs \$5,065, covers 18.6 per cent of a \$913 lot. A statistical analysis of last year's mortgages and mortgagors.

BECAUSE the business of the Federal Housing Administration is to insure mortgages made by private lenders, its annual report to Congress is as much a definition of U. S. home financing as it is an account of FHA activities. With 102,000 premium-paying mortgages as a basis, the report released this summer analyzes the security, the borrower, and the lender; produces a unique picture of the most popular mortgage contracts written during 1937.

Significant is the fact that popularity's foundation seems to be the definitive limit of the National Housing Act. Thus, loans for 80 per cent of property value and amortized in twenty years accounted for almost 60 per cent of the 1937 total, and pointed to the liberalization of lending terms in the 1938 amendments.

Reason for this straining at the Act's boundaries is easy to find in 1937's mortgagors and the type of homes they bought. One-fourth of them had incomes between \$2,000 and \$2,500, another fourth had incomes of less than \$2,000. Since this group commonly has small savings, it can achieve home ownership only when the monthly costs are small. And, 1937 mortgages insured by FHA provided just that—over 50 per cent of the borrowers are paying under \$30 a month, leaving plenty of leeway for operating and maintenance costs. Upholding the mossy axiom that no more than one-fifth of monthly income should go for rent, 61 per cent of all borrowers pay less than 15 per cent of their income for monthly amortization and interest, and 92 per cent pay less than 20 per cent of their income.

Averages. Somewhat above these most popular groups of mortgage characteristics are the average figures. Although 1937 was field year for low income groups (but probably a piker compared with 1938) the average borrower had a middle-class income and purchased a house well within his means. More light is cast on this borrower in a synopsis of the 1937 average mortgage transaction on the single-family, FHA-insured home:

Borrower's income	\$3,045
Total property value	\$5,384
Ratio of value to income	1.8
Monthly payment	\$32.43
Mortgage loan	\$4,541
House value	\$5,065
Land value	\$913
Plot area (sq. ft.)	9,199
Per cent of land coverage	18.6

The first four items refer to premium-paying mortgages on new and refinanced

homes; the last five, to mortgages accepted for insurance solely on new homes. Although not entirely comparable, together they provide a good sample of 1937's greatest mortgage activity.

Security. Dominant security for the 102,000 mortgages was the single-family home. It accounted for 94 per cent of the total, and its average value was \$5,384. Average value per dwelling unit of two-family houses that were insured was \$3,222; of the three-family, \$2,767; of the four-family, \$2,789. Even for families of low income, the illusion of independence implied in the free-standing house apparently carries more weight than low cost.

The most popular type of new one-family houses had five rooms (42 per cent); six rooms came second (30 per cent). Three-quarters of them had one bathroom; one-half had a one-car garage. The proportion of the lot covered by the house was generally low: 60 per cent of the dwellings covered less than 20 per cent of the lot, 80 per cent covered less than 30 per cent.

It is interesting to note that as total value of the houses and lots increased up to \$6,000 the area of the lot *decreased* from 11,700 sq. ft. for properties valued at less than \$2,000, to 8,200 sq. ft. for those in the \$5,000 range (see table at bottom of page). In fact, the cheapest houses were built on larger lots than were houses costing \$15,000 and more. Consequently, the most expensive houses covered a greater proportion of the lot than did the cheaper ones. But even the smaller lots would seem extravagant in the average subdivision—the area resolving into dimensions of 75 x 110 ft. Reason for the decrease in lot sizes as costs increase in

the lower brackets was probably the gradual shift of location to more select and higher priced neighborhoods, for the value per square foot increased progressively from 3 to 17 cents.

City Size. Although it might be expected that property costs would vary according to the size of the cities in which they were located, such was not reported as the case. Average land values were higher in the large cities than the small, despite much smaller plot areas; but the average value of land and building combined did not vary uniformly by city size groups.

In cities of over 1,000,000 population the average cost of new one-family dwellings was \$6,566. In the smallest towns it was \$5,823. The highest average cost (\$7,265) was in cities with 50,000 to 100,000 population and the lowest cost (\$5,247), for no apparent reason, was in the next larger size group.

By States. The South's temperate climate usually makes the cost of shelter in that area lower than in the North. But, no such general regional variation is shown by the one-family properties securing FHA's 1937 premium-paying mortgages. Average property values went from \$3,077 in South Dakota to \$9,021 in the District of Columbia. Neither is there any geographical consistency in the average income of borrowers; they ranged from \$2,249 in Wyoming to \$4,694 in Nevada. Consistent, however, is the conservatism reflected in the ratio of annual income to property value, varying from a low of 1.2 times income in Nevada to 2.4 times in the District of Columbia. In three States, average property value exceeded two times annual income. However, the national average of 1.8 times income was well within the most conservative mortgage lenders' rule-of-thumb.

Tabulated below are the average property characteristics of new single-family homes which secured mortgages accepted for insurance in 1937 by the FHA:

1937 SINGLE-FAMILY PROPERTY

Property cost	Per cent of 1937 total	Land Value	Plot area (sq. ft.)	Value (sq. ft.)	Per cent of land coverage
Under \$2,000	0.3	\$303	11,676	\$0.03	10.0
\$2,000—2,999	4.9	339	10,676	0.03	12.9
\$3,000—3,999	14.4	466	9,739	0.05	15.3
\$4,000—4,999	20.1	614	8,996	0.07	18.0
\$5,000—5,999	19.7	780	8,153	0.10	21.5
\$6,000—6,999	14.3	963	8,165	0.12	21.4
\$7,000—7,999	9.4	1,137	8,755	0.13	20.0
\$8,000—9,999	8.9	1,041	9,560	0.15	18.7
\$10,000—11,999	3.7	1,798	11,475	0.16	18.1
\$12,000—14,999	2.4	2,239	13,017	0.17	16.1
\$15,000 and over	1.9	1,846	11,113	0.17	22.7

MODELS BUILD A SUBDIVISION

with the help of good publicity. Sample houses, rooms and town attract 500,000 Los Angeles visitors, prove the spice in variety.

UNSOLICITED, unbiased endorsement of any product is an excellent foundation for successful publicity. Therefore, when the Los Angeles Investment Co. purchased the site on which the athletes' quarters of the Xth Olympiad had once stood, they got not only 316 acres of land for a subdivision but also some good publicity. With the property went official endorsement of the site as a good place for athletes and consequently, by inference, for lesser human beings. With it also went the right to title the subdivision "Olympic Village."

President Ray F. Ingold was publicity-wise, however. Instead of banking on the pulling power of the site's history alone, he sought public attention for his subdivision in a half dozen different ways. Although the Investment Co. builds no houses, its lot-selling program has attracted crowds over a period of a year with three model houses, a miniature model town, a model kitchen and an attractive, young model woman.

Development. Principal predicators of this type of publicity are the character of the site and the income groups it seeks to attract. Olympic Village is actually an extension of a large land development project of the Los Angeles Investment Co. known as Viewpark, much of which has been successfully marketed to such acceptable purchasers as college professors (the University of Southern California is only 10 minutes away) and other professional men. These owners have incomes beginning at \$4,000, build houses varying in price from \$6,000 to

\$30,000—a price range that is likely to be duplicated in Olympic Village where lots alone cost \$2,000 and up.

When purchased in 1936, Olympic Village was nothing but a bean field; athletes' huts had been auctioned off, carted away. Favorable to its development has been its position only five miles from the center of Los Angeles, seven miles from the Pacific Coast, and the respectable view provided of mountains in one direction, the ocean in the other. Less favorable, the fact that most of the other high priced neighborhoods have taken root several miles to the north in the Beverly Hills—Hollywood area.

Long experienced in land development, the Company laid out curved streets to fit the hills' contours, the lots with comfortably wide frontage. They feature decorative street lamps and subterranean utility wires. To convince prospects that a harmonious neighborhood will be developed, property deeds require that house designs be passed upon by an architectural committee. Houses already built indicate, however, that this committee holds no brief for any one style, is not rigid in its restrictions.

Furnished. Although the lots in Olympic Village were not put on the market until September 1937, the first of the model houses, whimsically titled "Cozy Glen Cottage," was opened to the public a month earlier. Located in nearby Viewpark, it served not only to bring the new subdivision into the world but helped to sell the still vacant lots in the old one. With six rooms, a bath, porch, and two-car garage,

it was placed luxuriously cross-wise on its 83.5 ft. lot. And it was that desirable orientation that the Los Angeles Investment Co. wanted to bring to public attention. Notoriously fickle, however, the public found more interest in the den and its bar, the barbecue pit on the porch, the automatic garage doors and, above all, in the \$5,200 worth of house furnishings supplied by Bullocks, large Los Angeles department store. Salesmen complained that Bullocks was selling more furniture than they were lots, but remained comparatively calm until one woman came back eight times to take careful measurements of all the drapes in the house.

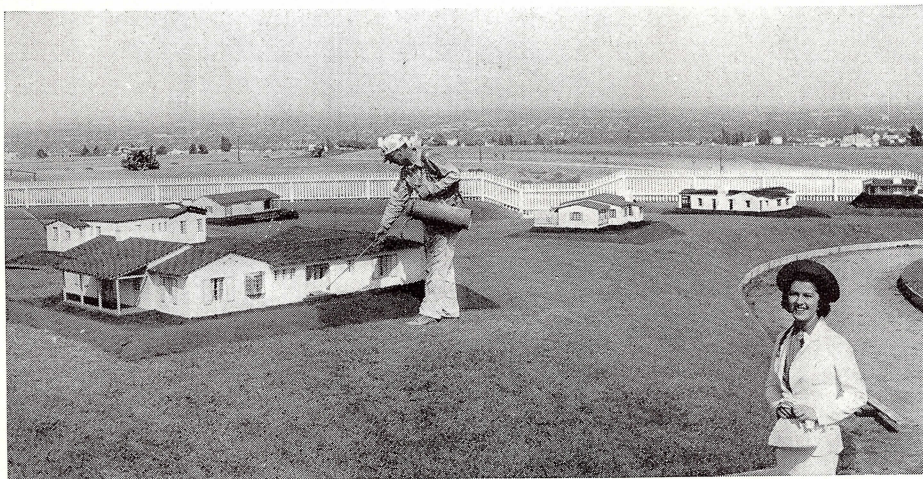
Most important fact about those visitors is that they were in considerable number. During the first 90 exhibition days, they totaled 120,000 and they did not get there by intuition. Back of the Cottage's debut was smart newspaper publicity. Newsads told of the attractive furnishings, gave detailed highway directions. Publicity handouts flooded the local papers and, to the credit of the ex-reporter who prepared them, were printed. Results: between August and December metropolitan papers printed 1,681 inches of gratis publicity copy, 71 photos. At \$5 an inch, the total was worth \$8,405, not counting pictures whose value in relation to words is only too well known. It was in those pictures of the model house that the human model played her part.

Finally, after the exhibition was over, Cozy Glen Cottage was sold for \$9,950 sans furniture.

Despite the apparent success of this model house, the sponsors insist that it was not particularly effective in selling lots. Nevertheless, construction was started on 28 houses costing \$225,000 in both Viewpark and Olympic Village during October and November, 1937—just as Recession struck and thinned out the ranks of would-be dotted-liners.

Unfurnished. Due to their experience with the furnished model house, Los Angeles Investment Co. planned an unprecedented thing—an unfurnished one wisely supplied with a few other attractions. Actually located in Olympic Village, the house known as Viewpoint Colonial, was perched on a choice one-third-of-an-acre lot, had a commanding view of the surrounding country. Being unfurnished, it aimed to awe visitors with its electric gadgets, special construction methods, plate glass mirrors, leather upholstered window seats, and its \$29,000 cost. With even heavier promotion than Cozy Glen Cottage, it has received an estimated 175,000 visitors.

Because the Los Angeles Investment Co. has many offices in the Los Angeles area and does not record the motivating force behind purchases, no data are available on the number of sales directly attributable to the two model houses. But President Ingold has offered interesting comment on furnished vs. unfurnished: "We have found



TINY Modeltown was lent by FHA for exhibition, attracted 200,000 visitors in three months. In the foreground is the human model; in the middleground, 6 of the 35 houses; in the background, unbuilt Olympic Village; beyond that, the view.

that homes of real merit are best presented unfurnished, as this permits . . . salesmen to discuss problems of home site selection and building in the logical order in which the average prospective builder would face these problems." To show that he meant it, Ingold presented a third model house—resembling Silver Monterey—and it too was unfurnished.

Modeltown. At the same time model house No. 1 was on display, the promoters opened an exhibit of miniature houses on the sweep of a hill in Olympic Village. Titled "Modeltown," the houses were a loan from FHA and had originally been part of a display at the California International Pacific Exposition. Thirty-five models were re-exhibited, a majority of which were indigenous California bungalows and ranch houses. There were also a few modern dwellings among which designs by Architects Richard Neutra and George Adams were outstanding.

Located at the far end of Olympic Village, primary purpose of Modeltown was to pull visitors to the new subdivision. Logical assumption was that those who had trekked to Cozy Glen Cottage would make the small additional step to Modeltown. Thus, each subdivision would be viewed by a maximum number of Los Angeles model-house-addicts.

A secondary purpose was to demonstrate FHA's financing terms, although no attempts were made to sell the plans, or put the terms into practice. But publicity owing FHA could not complain; 15,000 visitors were counted the first day of the show, 200,000 were estimated between September 22 and December 15.

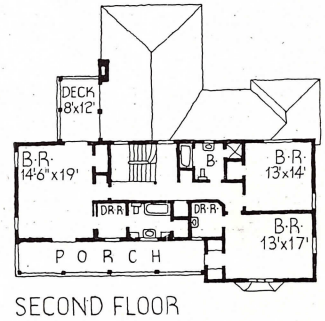
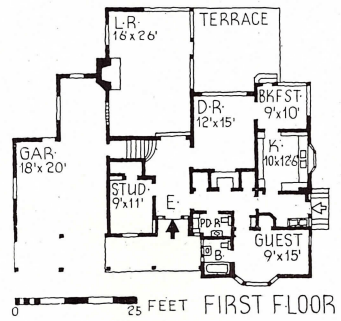
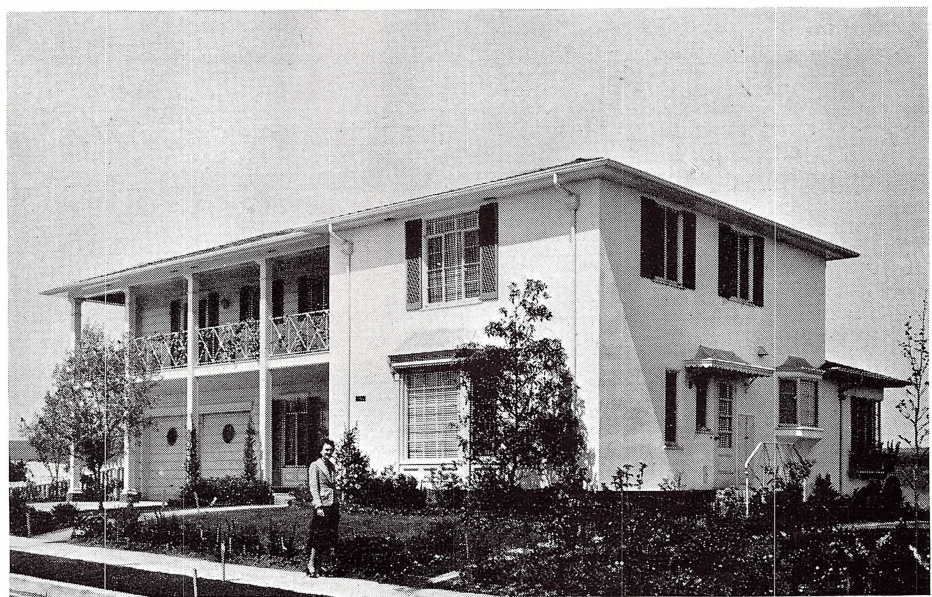
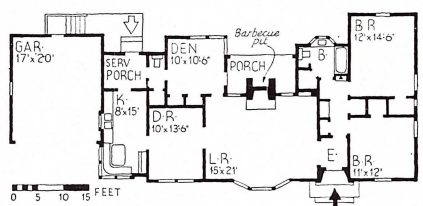
Also exhibited at Modeltown was a full-sized electric kitchen by the Bureau of Light and Power of the city of Los Angeles.

Results. Sum total of this many-sided publicity is a thriving subdivision. This year, between January and August, 116 houses costing \$732,328 were built in the entire Viewpark area. And at present, the newer Olympic Village has twenty houses completed or under construction. When Cozy Glen Cottage was opened, the street on which it was built was otherwise empty. Now it is a neighborhood. Likewise, the vacant lots near model house No. 2 are greatly out-numbered by new houses.



Streib Photos

RETURN TO
M-G-M ART
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PUBLICITY sold the public on visiting these two model houses. In turn, furnished Cozy Glen Cottage (above), tilted with unfurnished Viewpark Colonial for top honors in selling lots. Winner, in the eyes of the sponsors, was the latter. But the loser, unbowed, was sold after the fanfare for \$9,950.

A \$65 MILLION SHOVE

hastens liquidation of New York's defunct mortgagees.

POSSIBLE solution of one of realty's knot-tiest problems, liquidation of defunct guarantee companies, came last month from an unexpected source. President George L. Bliss of the Federal Home Loan Bank of New York announced a plan for refinancing the mortgages of those companies by member institutions of his bank.

Since all previous attempts at liquidation have proved somewhat viscous, the Bliss program made welcome news. It will be fourfold in benefit: 1) straight mortgages protected by the 1933 moratorium would be exchanged for amortized mortgages; 2) payments to certificate holders would be made; 3) idle funds in the bank's member institutions (principally savings and loan associations) would be put to use; and 4) need for a moratorium would be lessened. Although this plan is of primary interest to the New York market, which was the focus of guarantee mortgage activity, it also pertains to persons throughout the country to which the companies sold certificates.

Liquidation of these companies has been difficult. No one wants to buy straight mortgages on old houses—even at sizable discounts—when those mortgages are protected from foreclosure by a mortgage moratorium. Yet the moratorium could not be lifted to relieve the situation, because the threat of immediate foreclosure on so great a block of mortgages would be harmful to the entire real estate market. Thus, a vicious triangle has held this section of the market tight and has become a constant deterrent to sound recovery.

Plan. In operation the plan would be quite simple. It hinged on the necessity for finding a plum attractive enough to induce the mortgagors to step out from behind the protection of the moratorium and take amortized mortgages for straight ones. That plum was found in the large discounts liquidators were willing to give to purchasers. The plan simply gives the home owner the benefit of that discount.

Example: A lending institution would not refinance a \$4,000 mortgage on an old house appraised at \$5,000, but would probably be willing to make a \$3,600 mortgage. So, allowing \$100 for expenses, the original straight mortgage would be discounted \$500, and the remaining \$3,500 would be refinanced by an amortized loan. In effect, all parties stand to

benefit; the owner gets a smaller mortgage, the liquidator gets cash for a mortgage he had expected to sell at a discount anyway and the lending institution gets a sound mortgage loan.

Three months ago, after an agreement had been reached between the New York FHLB and State Superintendent of Insurance Louis J. Pink, two member institutions inspected properties held by one of the liquidating units, found that their offers to purchase were acceptable to both the home owners and the liquidators. On the basis of these findings, the bank last month announced that arrangements with member institutions had been completed whereby funds totaling \$65 million will be directed immediately toward putting the program into action.

How much money will be required, it is impossible to say. No one knows how many of the mortgages are tied up in home properties, and no one knows how many of them would prove acceptable as investments to the participating institutions.

Results. Within four days after the plan had been heralded in the press, 20 requests for additional information were received from trustees of various certificate issues. The remainder will be circularized so that all 225 of them may be given an opportunity to cooperate in the program.

COST TREND CHANGES.

FHLBB index shows leveling tendency after year's descent.

WEIGHT was given to the argument that the downward course of building costs has about hit bottom, when the Federal Home Loan Bank Board announced fortnight ago that its small house cost index after eleven consecutive drops was showing the first significant signs of leveling off. Thus, cost of building the Board's base house in August was below the May cost in nine of the 23 reporting cities, unchanged in seven and higher in seven. During the preceding three months when only 21 cities in this group reported, costs dropped in thirteen, remained unchanged in three and advanced in five.

Largest May-August decreases took place at Pittsburgh, Pa., and Wheeling, W. Va., where the cubic foot cost dropped one cent. Largest increase, also one cent, was registered at Columbus, O. Fluctuations by FHLBB Districts indicate that the tendency toward steadier costs is beginning in the South, for costs were generally downward in the Pittsburgh and Los Angeles Districts as opposed to an unchanged-to-higher movement in the Cincinnati and Little Rock Districts.

FHLBB DISTRICTS		CUBIC-FOOT COSTS			
STATES AND CITIES	AUG. 1938	MAY 1938	AUG. 1937	AUG. 1936	
PITTSBURGH:					
DELAWARE:					
WILMINGTON	\$0.246	\$0.246	\$0.242	\$0.221	
PENNSYLVANIA:					
HARRISBURG	.237	.243	.250	.233	
PHILADELPHIA	.226	.232	.249	.207	
PITTSBURGH	.270	.280	.283	.242	
WEST VIRGINIA:					
CHARLESTON	.246	.248	.262	.227	
WHEELING	.252	.262	.271	...	
CINCINNATI:					
KENTUCKY:					
LEXINGTON	.222	.222	.238	.218	
LOUISVILLE	.241	.238	.253	.226	
OHIO:					
COLUMBUS	.247	.237	.268	.236	
TENNESSEE:					
MEMPHIS	.236	.236	.242	.213	
NASHVILLE	.212	.209	.229	.213	
LITTLE ROCK:					
ARKANSAS:					
LITTLE ROCK	.215	.215	.217	.217	
LOUISIANA:					
NEW ORLEANS	.263	.262	.251	.216	
MISSISSIPPI:					
JACKSON	.253	.255	.254	.224	
NEW MEXICO:					
ALBUQUERQUE	.277	.275	.279	.257	
TEXAS:					
DALLAS	.251	.242	.253	.235	
HOUSTON	.250	.245	.257	.239	
SAN ANTONIO	.252	.252	.260	.231	
LOS ANGELES:					
ARIZONA:					
PHOENIX	.266	.274	.283	.254	
CALIFORNIA:					
LOS ANGELES	.238	.238	.250	.220	
SAN DIEGO	.243	.244	.256	.228	
SAN FRANCISCO	.264	.266	.269	.250	
NEVADA:					
RENO	.273	.273	.278	.263	

The House on Which Costs Are Reported is a detached 6-room home of 24,000 cubic feet volume. Living room, dining room, kitchen, and lavatory on first floor; 3 bedrooms and bath on second floor. Exterior is wide-board siding with brick and stucco as features of design.

The house is *not* completed ready for occupancy. It includes all fundamental structural elements, an attached 1-car garage, an unfinished cellar, an unfinished attic, a fireplace, essential heating, plumbing, and electric wiring equipment, and complete insulation. It does *not* include wall-paper nor other wall nor ceiling finish on interior plastered surfaces, lighting fixtures, refrigerators, water heaters, ranges, screens, weather stripping, nor shades.

Reported costs include, in addition to material and labor costs, compensation insurance, an allowance for contractor's overhead and transportation of materials, plus 10 per cent for builder's profit.

Reported costs do *not* include the cost of land nor of surveying the land, the cost of planting the lot, nor of providing walks and driveways; they do not include architect's fee, cost of building permit, financing charges, nor sales costs.

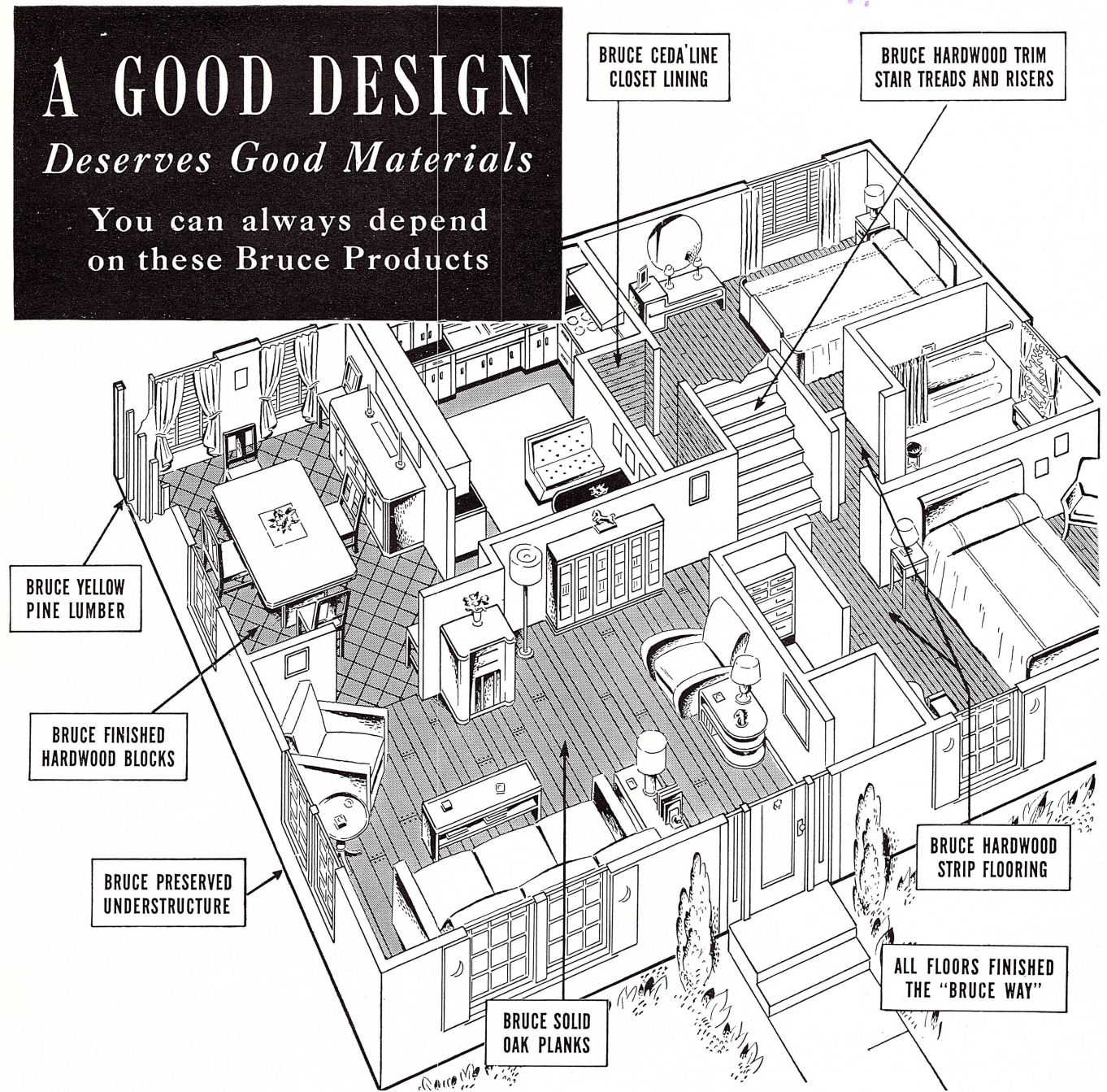
In figuring costs, current prices on the same building materials list are obtained every three months from the same dealers, and current wage rates are obtained from the same contractors and builders.

TURN TO
M-G-M ART
DEPT.

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Deserves Good Materials

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of good construction and are "made to last for generations." They definitely contribute to the beauty and durability of a home, mark it as individually planned and architecturally designed.

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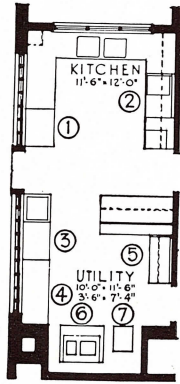
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City..... State.....

Another prize-winning All-Gas Home

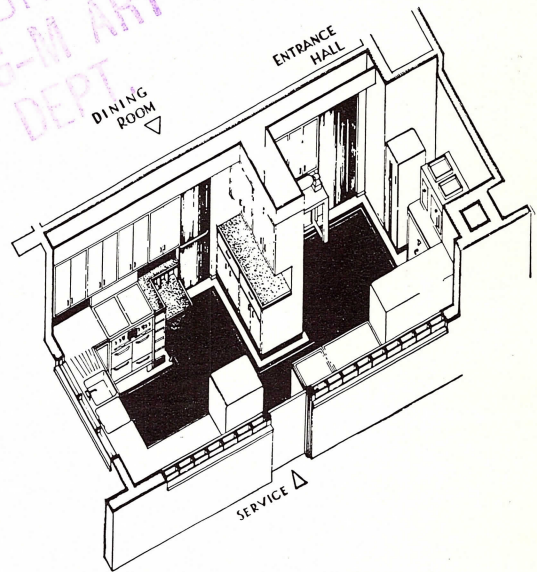
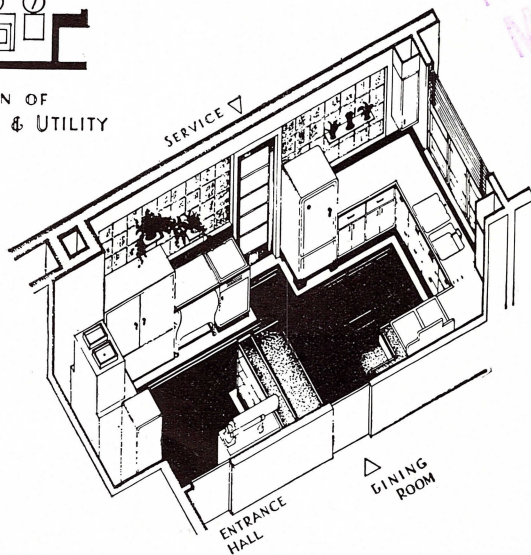
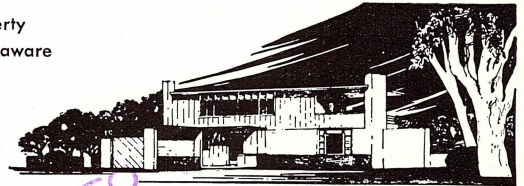
ARCHITECT:

Frank S. Dougherty
Wilmington, Delaware



PLAN OF
KITCHEN & UTILITY

1. Gas refrigerator.
2. Gas Range.
3. Washer.
4. Gas laundry dryer.
5. Gas Ironer.
6. Gas house-heating unit.
7. Automatic Gas water heater.



Now build an  All-Gas Home ... enter the \$10,000 prize competition for builders and their architects.

The All-Gas Home Building Competition closes July 1, 1939. Write for entry blank and free booklet, containing all the information you need. Competition Director, American Gas Association, 420 Lexington Avenue, New York City.

Kitchen and Utility room side-by-side, thanks to cleanliness of Gas

NO dust...no soot...no smoke...so laundry equipment may safely be placed right next to the heating unit—right next door to the kitchen.

Such neat coordination of house-keeping facilities is practical only when Gas does the 4 big jobs. The new gas appliances are simple, compact, efficient. No fuel storage space is required. Gas offers greater living area per dollar of building money.

And the absence of complicated mechanisms and delicate parts makes gas appliances cost less to buy—to install—to maintain. That accounts for the increasing popularity of All-Gas Homes among architects and homeowners both.

For full information and detailed specifications of the new gas ranges, refrigerators, water heaters, and house heating equipment, get in touch with your local Gas Company.

AMERICAN GAS ASSOCIATION

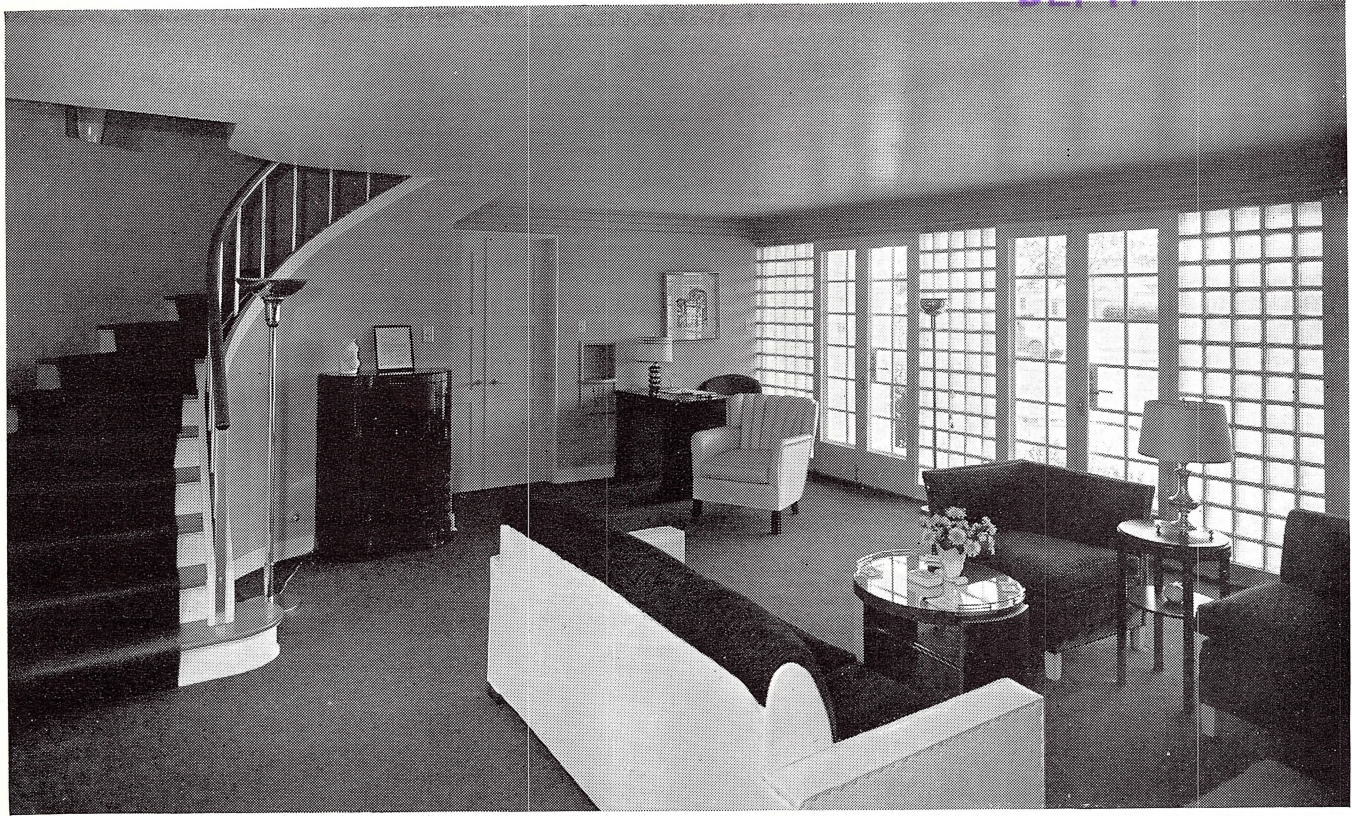
LET

Gas
DO THE 4 BIG JOBS

**COOKING
WATER HEATING
REFRIGERATION
HOUSE HEATING**



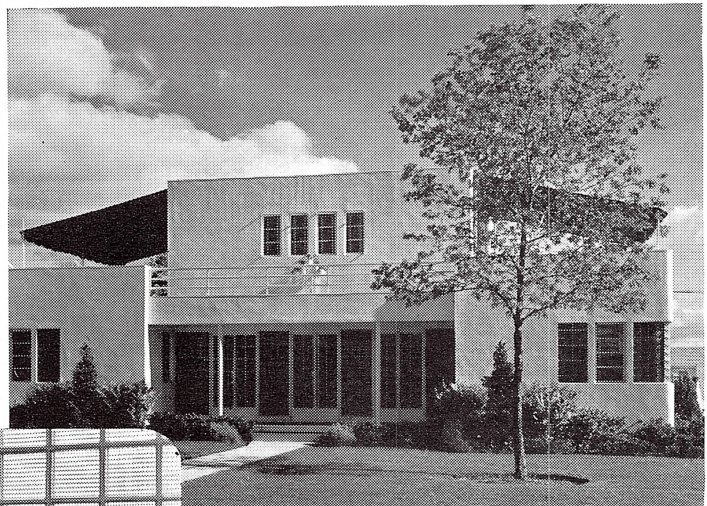
Be sure the gas appliances you specify bear the Approval Seal of the American Gas Association Testing Laboratories.



The C. M. Joiner residence, Dallas, Texas. John Perkins, Architect. Below: exterior, Joiner residence.

Modest YET MODERN TO THE MINUTE WITH *Insulux*

● INSULUX is just as adaptable to the modest small home as it is to larger structures. Owens-Illinois INSULUX Glass Block blends equally well with almost any type of architectural design . . . creating a focal point of sparkling interest regardless of whether the specifications call for twenty blocks or two hundred. . . INSULUX permits the economic operation of winter air conditioning without curtailing the amount of light or light-giving areas. . . INSULUX admits light, retards heat flow and sound transmission; all of primary importance to the home prospect or purchaser. Thousands of successful installations have been made in almost every type of building. . . Write for complete illustrated details about INSULUX. . . Owens-Illinois Glass Company, Toledo, Ohio.



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Let's do something about "more closet space"



"Everything is perfect except the closets.
Install K-VENIENCES and I'll be satisfied!"

THE biggest "pet peeve" in the American household today is "lack of closet capacity"...solely because the only provision made in the average closet for hanging clothes is a cross bar and a few inadequate hooks.

K-VENIENCES SOLVE THIS PROBLEM!

A complete line of modern closet fixtures which actually double closet capacity without increasing closet space, regardless of size or shape. More than 40 useful, space-saving fixtures, sturdily built, handsomely finished, scientifically designed to make systematic use of every inch of space. For every item of the family wardrobe, for every closet in the house. Attachable *clothing carriers... extension rods... garment brackets... shoe racks... tie racks... hat holders... hook strips... trouser and skirt hangers... umbrella and cane racks... utility racks...* and many others. The ideal answer to the demand for greater closet capacity in houses, apartments, hotels, clubs, hospitals, dormitories, offices, yachts, trailers, etc.

No closet is thoughtfully planned or properly equipped without K-VENIENCES. They make tidiness automatic, keep apparel within easy reach, in better condition and make the most of available space. Be sure to specify and install K-VENIENCES in all new construction and remodeling. Evidence of extra thoughtfulness on your part, K-VENIENCES satisfy a definitely established need, mean greater satisfaction and living comfort for your clients... and enhance your reputation for doing a job right—complete to the last detail.

K-VENIENCES are as important for the clothes closet
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Catalog. Includes sketches of typical closets with suggested K-VENIENCE installations. Sold by leading Building Hardware Dealers or write direct. Let our Closet Planning Bureau help you on your next job. No obligation.



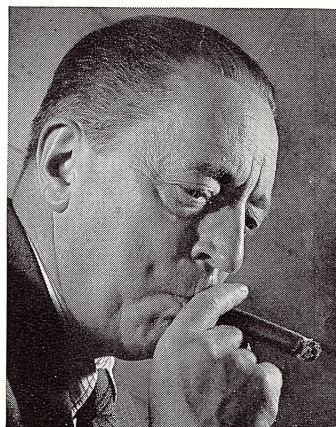
KNAPE & VOGT
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Dept. F-10, Grand Rapids, Mich.
Send me K-VENIENCE Catalog,
"How to Double Closet Capacity."

Name.....
Business.....
Address.....

FORUM OF EVENTS

(Continued from page 40)

TO ARMOUR



Otto Hagel

Professor Mies van der Rohe

EARLY in 1892, pioneer Chicago Packer Philip Danforth Armour founded Armour Institute of Technology. Aim: to stress the importance of technical training to industrial progress. A year later under the impact of Chicago's World's Columbian Exposition architecture was added to the curriculum, management of the Art Institute's school of architecture jointly undertaken by the Institute and Armour. Behind the smoke screen laid down by the Fair's romantic exaggeration of architecture as a "Fine Art," the aims of Founder Armour rapidly became obscured. The unsuspecting hen, Engineering, had become mother to alien ducklings who waddled waywardly toward strange waters.

Last year young Armour President Heald pondered over his Aesopian problem, thought he glimpsed a possible new ending to the fable in the unheralded arrival in Chicago of famed ex-Bauhaus director No. 3. His plans crystallized last month, President Heald announced the appointment of Ludwig Mies van der Rohe as Director of the School of Architecture. To Mies architecture is good or bad, and to achieve the good the architect must be a creative technician, more interested in the structural and esthetic aspects than in the economic or sociological.

To his practical work as an assistant in the office of Germany's grand old man of modern architecture, Peter Behrens, Mies owes his architectural training. To his open-planned Tugendhat house at Brno, Czechoslovakia, he owes his international reputation. He was Director of the Dessau Bauhaus from 1930 to 1933. Returning from a pilgrimage to Taliesin, home of famed Architect Frank Lloyd Wright, John Holabird (Holabird & Root), acting for a special committee of architects on behalf of Armour Institute, interested Mies in the school.

With the new director at Armour this month will be two other men who taught at the far-famed original Bauhaus, City Planner Ludwig Hilberseimer and Photo-Technician Walter Peterhans. "... To lead without fail to a clear and unequivocal spiritual orientation," students will tackle: 1) the nature of materials, 2) the nature of functions, 3) actual creative work in architecture.

AWARD

ROBERT L. SACKETT, former Dean of the School of Engineering at Pennsylvania State College has been awarded the Lamme Medal for achievement in the promotion of engineering education. Dean Sackett, eleventh recipient of the medal provided for in a trust fund created by the late Benjamin Garver Lamme, was selected for "his work in coordinating the thought of industry and education for the improvement of their understanding of their mutual problems." Since his retirement in 1937 Dean Sackett has devoted himself largely to work of the Engineering Council for Professional Development.

(Continued on page 62)

L·O·F

"Window Conditioning"

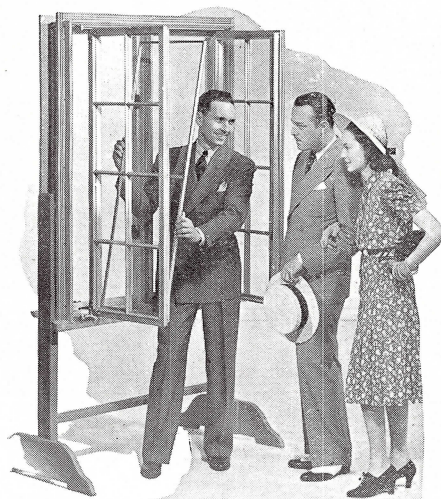
DOUBLE-GLASS INSULATION.



RETURN TO
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**BRINGS GREATER FUEL ECONOMY, ADDED COMFORT
AND BETTER HEALTH TO HOMES . . .**

"Window Conditioning" is accomplished by installing storm windows or double-glazed sash, thus providing two panes of glass instead of one. Between the two pieces of glass, a wall of captive air is formed. This air space is one of the best forms of insulation. It makes possible more uniform temperatures throughout the home and freedom from drafty danger zones on the floor and near the windows—healthful humidity without foggy windows, soiled draperies and moisture on window sills. "Window Conditioning" brings a greater fuel savings per dollar invested than any other single type of insulation.



American Builder, June 1937 (Condensed)

RECORD OF HEAT-LOSS TESTS — FIVE TYPES OF CONSTRUCTION

	1 Ordinary house construction without weather-strip- ping, storm sash, storm doors or insulation.	2 Half-inch insulation on ceiling and walls.	3 Weather- stripping only on all windows and doors.	4 Four-inch insulation on ceiling and walls.	5 Storm sash and storm doors all around.
Total Heat Loss BTU's . . .	159,175	139,974	125,741	118,773	110,383
Per Cent Saving		12.1	21.0	25.4	30.8
Sq. Ft. H.W. Radiation . . .	1060	932	837	791	735
Oil Per Season, Gals. . . .	3980	3499	3143	2969	2759
Cost of Oil Per Season . . .	\$ 286	\$ 252	\$ 226	\$ 214	\$ 198
Saving in Fuel		\$ 34	\$ 60	\$ 72	\$ 88
Cost of Construction		\$ 142	\$ 129	\$ 284	\$ 106
Interest and Deprecia- tion on Investment		\$9.94	\$9.03	\$19.88	\$10.60
Net Saving		\$24.06	\$50.97	\$52.12	\$77.40
Per Cent Return on In- vestment, Net		16.9	39.5	18.3	73.0
Years for Net Fuel Saving to Pay off Investment		5.9	2.53	5.45	1.37
Cost of Heating Plant . . .	\$1590	\$1398	\$1256	\$1186	\$1102
Reduction in Plant Cost . . .		\$ 192	\$ 334	\$ 404	\$ 488

THE FIVE numbered columns in the above table represent different combinations of insulation. The house to which these calculations were applied is two stories high, with unfinished attic space. It contains eight rooms and bath above the basement and is of frame and shingle construction with a concrete foundation.

Column 5—in Table—This chart tells the story if storm sash and storm doors were used all around. The fuel bill would go down \$88 or 30.8%. It would return 73% on the invested cost of the insulation and pay for itself out of fuel savings in about a year and four months. It would reduce the cost of the heating plant by \$488 and lop off 48,792 B. T. U. which represents a reduction in heat loss of 30.8%.

... From studies made by Professor G. L. Larson on a typical suburban residence of 8 rooms in Madison, Wisconsin, figured on a winter heating season of 260 days. The fuel used was oil figured at 7.2c per gallon.

Note that the fuel savings effected by "Window Conditioning" in this particular case are greater than any other form of insulation used.

In this case the savings in fuel costs in a single winter were sufficient to pay practically 84% of the cost of the improvement.

Net savings, figuring interest charged at 5% per year and depreciation of 5% on the storm sash and doors, were greater than any other single form of insulation. Storm sash and doors were figured at 25c per square foot.

Net return of 73% shown makes "Window Conditioning" not only a sound, but a very attractive, investment.

"Window Conditioning" proved to be an improvement that paid for itself in less than two winters. Dividends continue for many years to come.

**STUDIES CONDUCTED BY PROFESSOR
G. L. LARSON OF THE UNIVERSITY OF
WISCONSIN PROVE CONCLUSIVELY THE
VALUE OF "WINDOW CONDITIONING"**

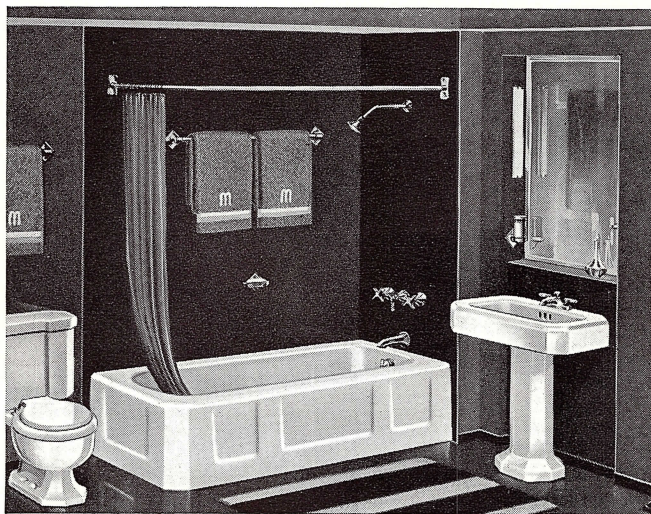
Architects can bring added comfort and economy to new homes, everywhere, by providing "Window Conditioning." And the quality of the glass specified for these double windows becomes doubly important. For your clients will be looking through two panes instead of one. L·O·F Quality Glass is today, as it has been for many years, clearer, brighter and flatter than any Window Glass that the industry has ever offered.

Libbey·Owens·Ford Glass Company,
Toledo, Ohio.

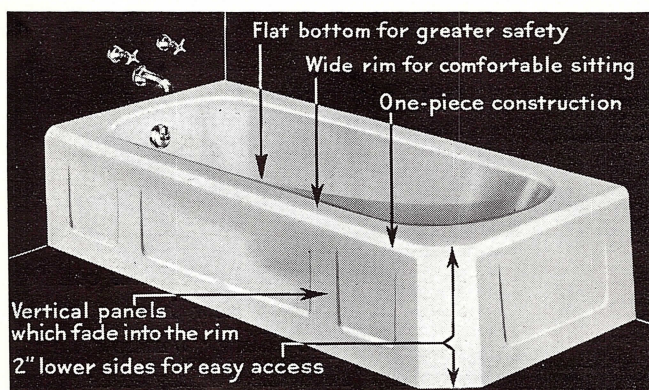
LIBBEY·OWENS·FORD  QUALITY GLASS

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No more humdrum bathrooms! SPECIFY A KOHLER COSMOPOLITAN BATH



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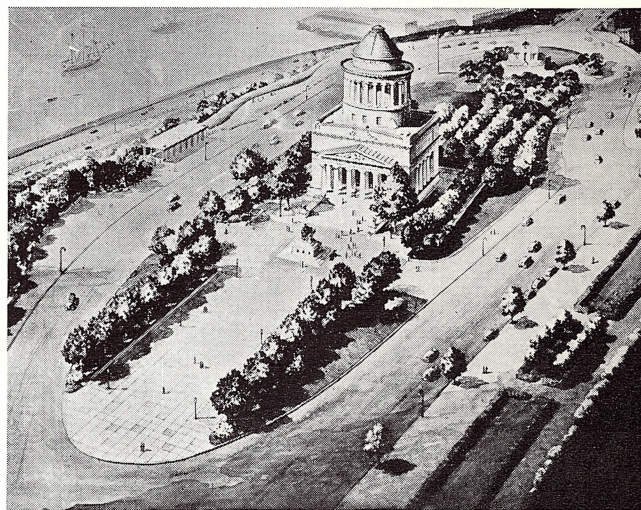
CLIENTS WILL BE IMPRESSED with a bathroom containing a Kohler Cosmopolitan bath. And they'll be impressed with other all-Kohler bathrooms—kitchens and laundries too! Kohler fixtures, when used with Kohler fittings, assure lifelong plumbing satisfaction. Write today for our handsome 4-color booklet, "Planned Plumbing." Kohler Co. Founded 1873. Kohler, Wisconsin.

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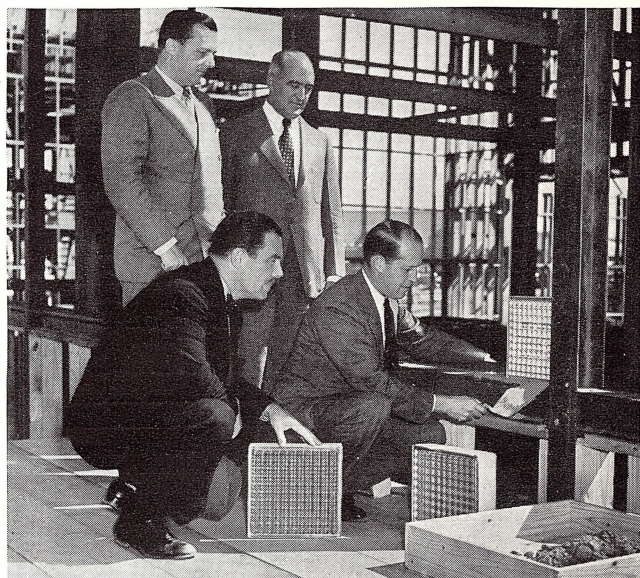
(Continued from page 58)



Wide World

AIR CONDITIONED MONUMENT

WHILE New Yorkers remain blissfully unaware, work has been going quietly forward for several weeks in elaborate plans to renovate Grant's Tomb. Approximately \$200,000 is being spent to remove the existing unsightly cap, place a pediment over the Doric portico, redesign and landscape the plaza and completely air condition the building. The air conditioning, which presents knotty problems in the building of ducts through some seven feet of concrete walls, is not entirely for the purpose of making comfortable the 200,000 tourists who flock to the monument. It will also serve to preserve the collection of tattered Civil War battle flags and protect the murals now being painted by Dean Fausset. The renovation is sponsored by the Grant Monument Association, the Park Department and the WPA.



GLASS MEN GUESS

ESTIMATES of attendance at New York World's Fair are sealed within the "Glass Center" cornerstone. Forecast Corning President Amory Houghton (left, standing), 52,500,000; Pittsburgh Plate President H. S. Wherrett, 47,500,000; Owens-Illinois President William E. Levis (with trowel), 46,000,000; Fair President Grover Whalen, 61,505,275.

(Continued on page 66)

FOR NOVEMBER

THE MOST TALKED-ABOUT HOUSES IN AMERICA

THE ARCHITECTURAL FORUM announces for November its special LIFE HOUSE ISSUE devoted to a professional presentation of the eight LIFE HOUSES with full and complete technical details.

These are the eight most talked-about houses in America. More than 18,000,000 people have seen them in the pages of LIFE, the most dramatic and significant treatment of a building subject ever to appear in a general magazine.

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THE FORUM's big LIFE HOUSE ISSUE will bring you up to date with this LIFE HOUSE program and give you complete and hitherto unpublished technical data on the LIFE HOUSES. This big issue also contains a large portfolio of fully documented case studies of more than 25 outstanding small houses which have recently been built for \$10,000 or less. The case studies include interior and exterior photographs, floor plans, construction specifications and cost data for each house.

If you are not already a subscriber — or if your present subscription has expired — simply sign and mail the attached card today. It will bring you the LIFE HOUSE ISSUE and keep THE FORUM coming to you regularly.

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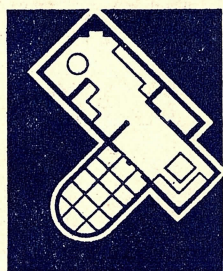
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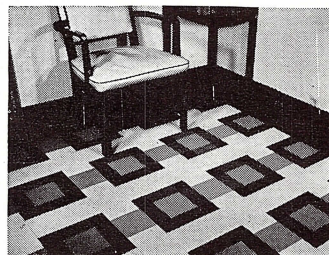
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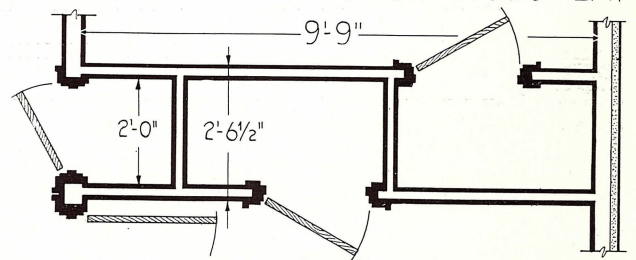


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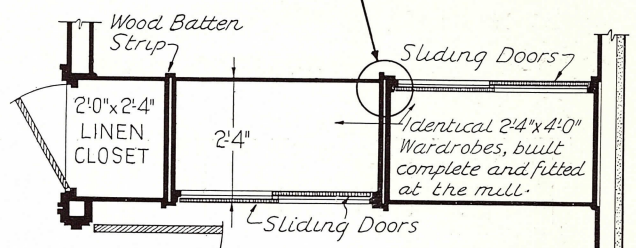
PRODUCTS and PRACTICE

(Continued from page 298)

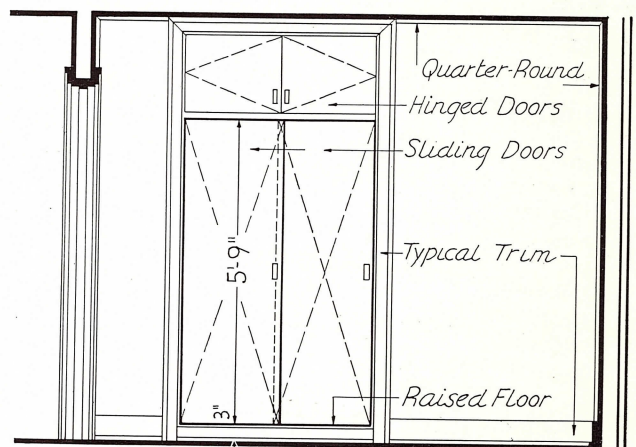
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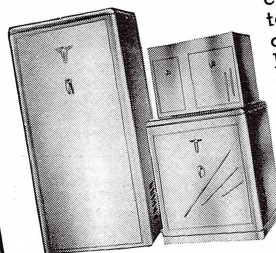
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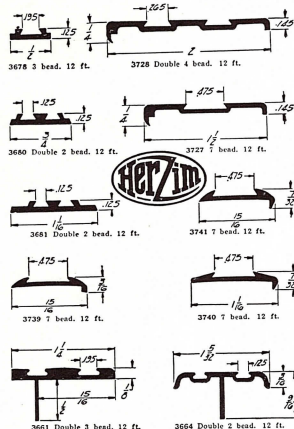
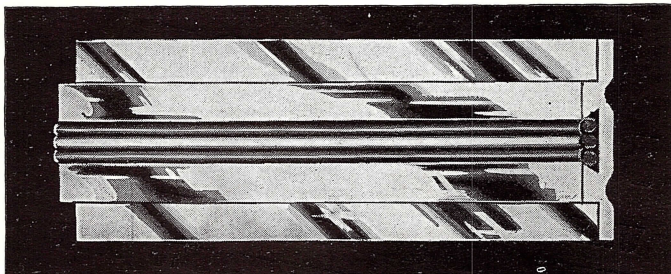
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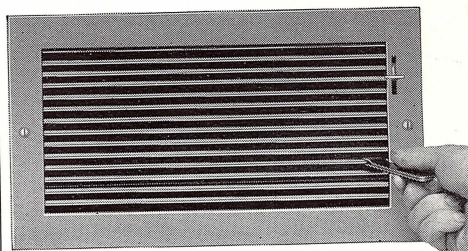
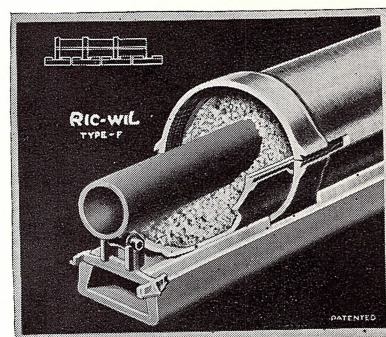
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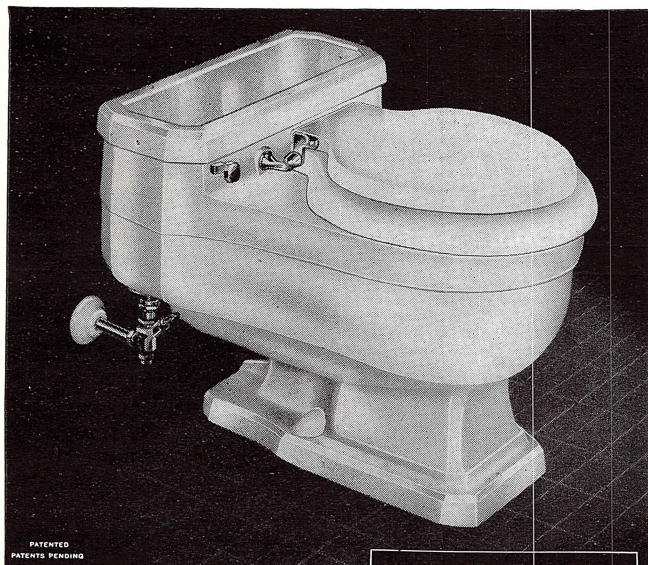
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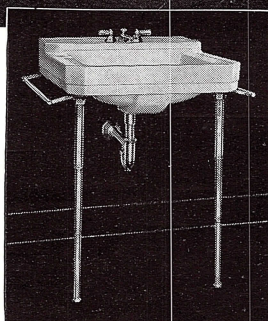
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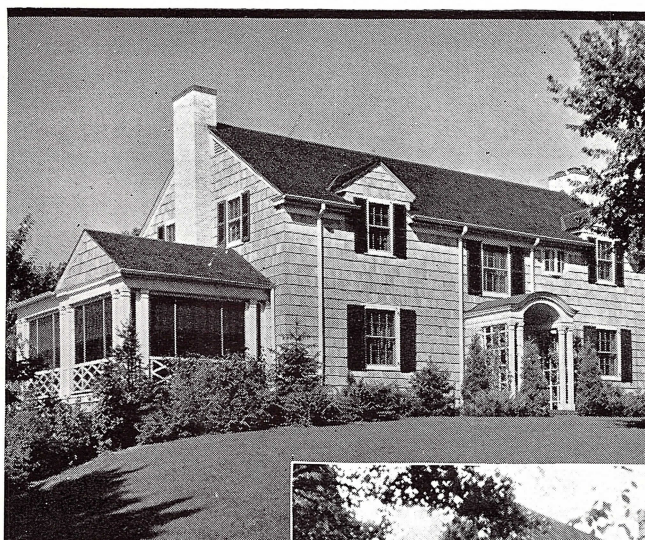


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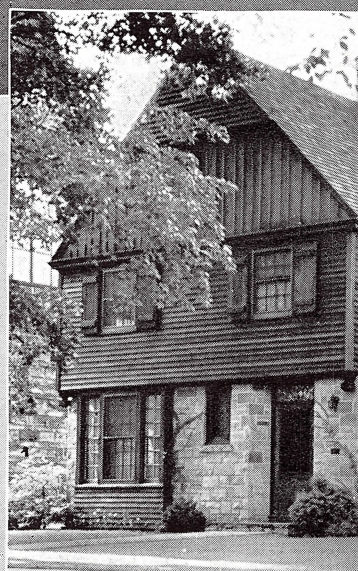
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Above: House at Minneapolis. H. H. Livingston, architect. Walls and roof stained with Cabot's Stain in contrasting shades. Blinds: Cabot's Gloss Collopakes. Chimney and trim: Cabot's DOUBLE-WHITE.



At right: House designed by Taylor and Maas, architects, Stevens Point, Wisconsin. Siding, shutters and roof stained with Cabot's Creosote Stains.

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Cabot's Shingle Stains

Creosote



Heavy-Bodied

LETTERS

(Continued from page 44)

fit if he used the proper technique so I moved out of my corner while he rode the table like a bucking bronco as we roared around the curves. Well, maybe it would fit, but he couldn't make it, so he went and got a third. While he was tussling with this one and obviously inviting a heart attack, the dining room porter arrived with the first course. So while I held the tray they both rassed with the table and after a good deal of resistance from it finally subdued it. So everything was dandy. The china is very nice, only the coffee cups are such an elegant streamlined shape that half the coffee sloshes out of them at the first jounce—and you know that water level route.

But they finally took away the soppy table cloth and from then on everything was lulu until the water supply was cut off. The porter said it was a guy's fault in Toledo who didn't shut a valve or something, but that didn't change the fact that that streamlined, air conditioned, scientifically lighted car didn't have a drop of water in it. Not a drop. So, just as in the good old days you crawled out of your berth and swayed down the aisle with

toilet case in hand, I crawled out of my "luxurious and conveniently arranged" Bedroom and swayed down the aisle into a little tiny room that couldn't have measured more than two by three, where tooth washing was accomplished by bracing the elbows on the two side walls and planting both feet wide apart and firmly. And so to bed, and, whether I was dreaming or not, it seemed I must be on the old Century jouncing up and down, up and down as we sped along "that gold highway to the West," the water level route.

And now this "giant streamlined locomotive, this colossal steel titan, this masterpiece of the rails" has dashed through the night and arrived at New York—twenty minutes late. But as I climb off I think, ah well, I still have one thrill coming to me, that "sensation in motive force," the streamlined engine, which I missed in Chicago. But I had forgotten all about Harmon where all good steam locomotives go. So "the ensemble of all steel cars melting into one long metallic tube" melted at last into a leetle black unstreamlined electric engine, which seemed to be perfectly pleased with itself. . . .

ESTHER TOMPKINS HOYT

New York, N. Y.

Errata

Credit for the wall coverings, Fred Harvey Restaurant (ARCH. FORUM, Sept., '38) should have read: main restaurant walls covered with

United States Plywood Corporation's aspen Flexwood.

To G. G. Scott (ARCH. FORUM, July, '38), apologies for misprinting his name.—Ed.

House for Sale

Forum:

Because the space and the layout given our house in the September Architectural Forum were so pleasing, I have some hesitation in asking for a correction in the text. Only because the house is for sale, and because the implication that the house has no basement prejudices many prospective buyers, do I feel it must be stressed that this house *has a basement*.

This basement (you may refer to plans in your office) lies under the entire house, it has cross ventilation, and a three inch concrete floor on which the chimney rests. It contains heat ducts, water pipes, water tank, and artesian well pump. The utility room on the first floor contains the heating plant and the laundry, has thus some of the ordinary functions of the basement, but in this case, in no way "replaces it."

Houses so constructed with fully excavated, ventilated air space below the first floor beams, have, as you probably know, lasted for centuries in Holland and other low lands where deep excavations are not practicable. * * * I could continue at length on this subject, but, for your sake, will not.

RUTH EMERY J. VINK

Darien, Conn.

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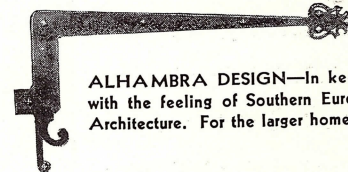
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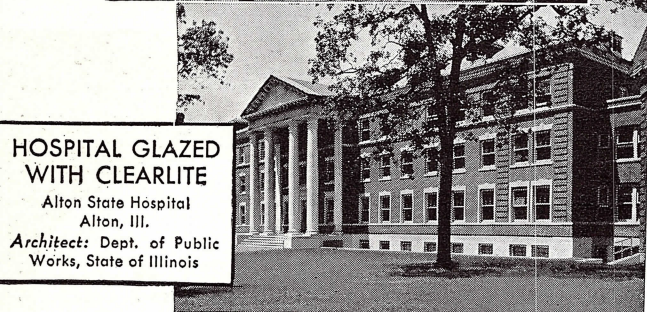
HOME GLAZED WITH CLEARLITE

Residence of W. J. Echols,
Jr., Ft. Smith, Ark.
Architects: Hoyt-Price-Barnes
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Haralson & Mott
Ft. Smith, Ark.



APARTMENT GLAZED WITH CLEARLITE

55 Lenox Road
Brooklyn, N. Y.
Architects: Seelig &
Finkelstein



HOSPITAL GLAZED WITH CLEARLITE

Alton State Hospital
Alton, Ill.
Architects: Dept. of Public
Works, State of Illinois

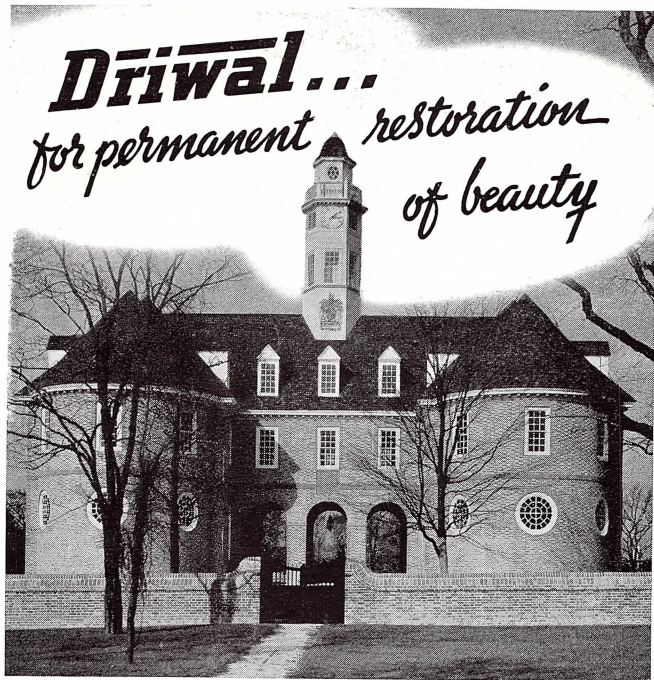
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SPECIFICATION AND BUYING INDEX

The advertising pages of THE ARCHITECTURAL FORUM have become the recognized market place for architects and all others engaged in building. Each month these pages offer the most complete guide to materials, equipment and services to be found in any magazine. A house or any other building could be built completely of products advertised in THE FORUM. While it is not possible for a magazine to certify building products, it is possible to open its pages only to those manufacturers whose reputation merits confidence. This THE FORUM does.

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